

# EXHIBIT 1

Appeal No. \_\_--\_\_

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**UNITED STATES COURT OF APPEALS  
FOR THE EIGHTH CIRCUIT**

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IN RE: CENTURYLINK SALES PRACTICES AND SECURITIES LITIGATION

The State of Oregon by and through the Oregon State Treasurer and  
the Oregon Public Employee Retirement Board, on Behalf of the Oregon Public  
Employee Retirement Fund and Fernando Alberto Vildosola, as trustee for the  
AUFV Trust U/A/D 02/19/2009,  
Individually and on Behalf of a Class of Similarly Situated Persons and Entities,

*Plaintiffs–Respondents,*

v.

CenturyLink, Inc., Glen F. Post, III, R. Stewart Ewing, Jr., David D. Cole, Karen  
Puckett, Dean J. Douglas, and G. Clay Bailey,

*Defendants–Petitioners.*

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On Petition for Permission to Appeal from the  
United States District Court for the District of Minnesota  
MDL No. 17-md-2795-MJD  
The Honorable Michael J. Davis

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**DEFENDANTS’ PETITION UNDER FED. R. CIV. P. 23(f) FOR  
PERMISSION TO APPEAL AN ORDER GRANTING CLASS  
CERTIFICATION**

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**CORPORATE DISCLOSURE STATEMENT**

Defendant-Petitioner CenturyLink, Inc., by and through its counsel, discloses that CenturyLink, Inc. is publicly traded on the New York Stock Exchange under the symbol LUMN. CenturyLink, Inc. has no parent company and no publicly held corporation owns more than 10% of CenturyLink, Inc.'s stock.

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## **INTRODUCTION**

The decision below reflects the need for this Court to clarify *IBEW Local 98 Pension Fund v. Best Buy Co., Inc.*, 818 F.3d 775 (8th Cir. 2016), regarding how defendants may rebut the fraud-on-the-market presumption of reliance when asserted at class certification in securities fraud actions.

This presumption, first announced in *Basic Inc. v. Levinson*, 485 U.S. 224 (1988), is the principal way investor plaintiffs seek to show the element of reliance is common to a proposed class: the law presumes “the price of stock traded in an efficient market reflects all public, material information—including material misstatements”—so “anyone who buys or sells the stock at the market price may be considered to have relied on those misstatements.” *Halliburton Co. v. Erica P. John Fund, Inc.*, 573 U.S. 258, 263 (2014) (*Halliburton II*). But the *Basic* presumption is rebutted where defendants provide evidence that the challenged statements did not have “price impact,” *i.e.*, did not affect the price of the defendant corporation’s securities.

In this case, instead of following *Best Buy*’s direction on how to analyze price-impact evidence, the district court accepted Plaintiffs’ embrace of standards from other circuits that explicitly depart from *Best Buy* and effectively convert the *Basic* presumption into an irrebuttable conclusion. The practical effect is to guarantee class certification in every securities fraud action—an untenable result

under *Best Buy*.

Contrary to that analysis, *Best Buy* applied the directive in *Halliburton II* that, where “evidence show[s] that the alleged misrepresentation did not actually affect the stock’s market price,” “the fraud-on-the-market theory underlying the presumption completely collapses, rendering class certification inappropriate.”

573 U.S. at 282–83. *Best Buy* specified what *Halliburton II* means in this Circuit:

- (1) To rebut the presumption, defendants need only “come forward with evidence showing a lack of price impact.” 818 F.3d at 782.
- (2) The presumption may be rebutted solely by “front-end” evidence about whether the alleged misrepresentations did or did not cause a stock price increase, even if the alleged corrective disclosures resulted in a “back-end” stock price decrease. *Id.* at 782–83.
- (3) Invoking a “price maintenance” theory—that the alleged fraud did not increase the price of a security but rather maintained an already-inflated price—does not transform a back-end price decrease into evidence that overcomes a lack of front-end price impact. *Id.* at 784.

The district court’s misapplication of these legal standards reflects the need for immediate review and further guidance from this Court on the import of *Halliburton II* and *Best Buy*.

First, the decision below relied on an incorrect analysis from the Second Circuit that described as “dictum” this Court’s recognition in *Best Buy* that defendants have only a burden of production—and not the burden of persuasion—



to rebut the *Basic* presumption. Order at 30–31.<sup>1</sup> Contrary to the Second Circuit’s reading, *Best Buy* deliberately and expressly adopted the burden-of-production standard. Indeed, the Court relied on Federal Rule of Evidence 301, which states that a party seeking to rebut a presumption does **not** bear the burden of proof. 818 F.3d at 782.

Second, the decision below incorrectly failed to determine whether CenturyLink’s front-end evidence of no price impact rebutted the *Basic* presumption. While Plaintiffs alleged that CenturyLink made over 200 misstatements on 52 different days, CenturyLink introduced undisputed evidence that its stock price increased on only four of those days (each involving the disclosure of unrelated positive news), and that its stock price **decreased** twice as often, on eight days. In response, Plaintiffs did not attempt to prove that any of the statements had a front-end price impact—which should have doomed their request for class certification.

Instead, the district court found the *Basic* presumption was not rebutted and reliance therefore was common to the class on three grounds that contradict *Best Buy* and *Halliburton II*:

- (1) Relying on another erroneous ruling from the Second Circuit, the decision below required CenturyLink to “affirmatively disprove **both**”

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<sup>1</sup> The Order is appended to this petition. All other documents cited from the motion below are attached as exhibits.

front-end and back-end price impact—*i.e.*, to prove that the alleged misrepresentations did not increase or maintain inflation in the stock price, **and** that the alleged corrective disclosures did not decrease the stock price. Order at 31 (emphasis added). But *Halliburton II* and *Best Buy* make clear that the standard to rebut the presumption is disjunctive, with front-end evidence alone being sufficient.

- (2) The decision below incorrectly ignored the lack of front-end price impact merely because Plaintiffs invoked a “price maintenance” theory that the stock price decreases following the alleged corrective disclosures showed the alleged misstatements had kept the stock price “inflated.” Order at 33–34. But *Best Buy* held that the bare assertion of “price maintenance” does not outweigh front-end evidence that has sufficiently rebutted the *Basic* presumption.
- (3) The decision below found it effectively dispositive that CenturyLink’s expert did not offer an opinion on the ultimate question of price impact. Order at 35. But such testimony is not necessary to satisfy a burden of production, and there was no basis to ignore CenturyLink’s substantial **evidence** of no price impact simply because its expert did not state an **opinion** on that specific issue.

Third, the decision below never analyzed CenturyLink’s back-end evidence showing the alleged corrective disclosures were not linked to any alleged misstatements and so had no price impact. The Order reasoned that this evidence should not be considered at the class-certification stage because it would establish a lack of loss causation, a merits issue. But as the Seventh Circuit recently observed, “*Halliburton II* teaches ... that a district court may not use the overlap [between certification and merits issues] to refuse to consider [defendants’] evidence.” *In re Allstate Corp. Sec. Litig.*, 966 F.3d 595, 608 (7th Cir. 2020).

This Court’s immediate review is warranted to address the significant implications of the ruling below. The issues are not limited to whether CenturyLink rebutted the *Basic* presumption, but speak directly to whether securities fraud plaintiffs in this Circuit can automatically obtain class certification by contending that “price maintenance” shows class-wide reliance. Securities fraud cases are filed only when a back-end stock drop has occurred—so if the mere existence of a stock drop suffices to overcome all front-end evidence of no price impact and all back-end evidence that happens to also relate to loss causation, the *Basic* presumption will be irrebuttable in this Circuit.

**QUESTIONS PRESENTED FOR REVIEW**

Whether review of the district court's Order is appropriate under Rule 23(f) where:

1. the district court held that defendants seeking to rebut the *Basic* presumption must satisfy a burden of persuasion, even though this Court in *Best Buy* applied a burden of production;
2. the district court ruled that front-end price impact evidence does not rebut the *Basic* presumption in a price maintenance case without sufficient back-end evidence, even though *Best Buy* held the presumption was rebutted based on front-end evidence alone; and
3. the district court declined to consider back-end evidence of no price impact because the evidence overlapped with the element of loss causation.

## **STATEMENT OF FACTS**

### **I. THE COMPLAINT AND INITIAL PROCEEDINGS**

This petition concerns a consolidated securities fraud action brought under Sections 10(b) and 20(a) of the Exchange Act. 15 U.S.C. § 78a, *et seq.* Plaintiffs purport to represent a class of investors who purchased CenturyLink securities between March 1, 2013, and July 12, 2017. Ex. 1 (the “Complaint”) at 2. The Complaint alleges that Defendants CenturyLink, Inc. and others (“CenturyLink”) secretly maintained a “years-long practice of routinely and systematically misquoting prices and improperly billing customers for services they did not request,” which Plaintiffs refer to as “cramming.” *Id.* ¶ 1. Plaintiffs allege Defendants made more than 200 statements that were false or misleading because they failed to disclose the alleged “cramming” scheme. *Id.* ¶¶ 190–263.

Plaintiffs claim a corrective disclosure occurred when a former CenturyLink employee filed a complaint containing allegations of cramming. *Id.* ¶ 152. Plaintiffs also allege two subsequent “corrective disclosures”—a news story about a consumer class action lawsuit, and a lawsuit announced by the Minnesota Attorney General. *Id.* ¶¶ 158–167. Plaintiffs claim investors were damaged by price drops in CenturyLink securities after these lawsuits were publicized. *Id.* ¶¶ 264–67.

## II. PLAINTIFFS' MOTION TO CERTIFY AND THE DISTRICT COURT'S ORDER

After the district court denied CenturyLink's motion to dismiss, Plaintiffs moved to certify a class of investors who purchased CenturyLink securities.

### A. CenturyLink Produces Evidence of a Lack of Price Impact.

To rebut the *Basic* presumption that the price of CenturyLink's securities reflected the alleged misstatements, CenturyLink produced undisputed expert evidence showing that, for 48 of the 52 relevant dates, the statements did not significantly increase the value of CenturyLink stock—front-end evidence of no price impact. Ex. 3 at 12–14; Ex. 8 ¶ 72. CenturyLink's expert, Bruce Deal, further showed that CenturyLink's stock price significantly *declined* on eight of the 52 dates (twice as frequently as it increased). Ex. 8 ¶ 77. Plaintiffs' expert confirmed these findings. *Id.* at 143–45 (Deal Exs. 18A, 18B). As for the four dates when the stock price increased, Deal identified positive disclosures, separate from the challenged statements, that were likely responsible. *Id.* ¶¶ 72–76.

CenturyLink further produced substantial back-end evidence of no price impact—*i.e.*, evidence showing the subsequent price declines did not result from any disclosure of the supposed “cramming” scheme. That evidence showed:

- that the *lawsuits themselves* were the relevant new information and risk disclosed—not any revelation of the alleged scheme, Ex. 3 at 18;

- state attorneys general settled related investigations into CenturyLink for modest amounts that are facially inconsistent with claims of any massive and systematic scheme, Ex. 10;
- CenturyLink never restated its financial results, Ex. 8 ¶ 21; and
- the generic “cramming” allegations in the whistleblower complaint reflected information that was already in the market, Ex. 3 at 17.

**B. Plaintiffs Shift to a “Price Maintenance” Theory to Sidestep CenturyLink’s Evidence of No Price Impact.**

Apparently unable to contest this evidence, Plaintiffs urged the district court not to consider it. In response to CenturyLink’s evidence showing no front-end price impact, Plaintiffs announced for the first time in their reply brief that they were pressing a “price maintenance” theory—that the relevant price impact occurred when the alleged misstatements kept the price of CenturyLink securities from going down, rather than making the price go up. Ex. 4 at 8–9. According to Plaintiffs, merely invoking this theory sufficed to conclusively overcome CenturyLink’s front-end evidence and prove class-wide reliance. *Id.*

With respect to CenturyLink’s evidence showing no back-end price impact, Plaintiffs primarily argued the evidence was “improper” to consider because it supported a “premature loss causation argument.” *Id.* at 4. Plaintiffs added that, because the district court had previously found they “adequately pled loss causation,” “Defendants must await summary judgment or trial” for the district

court to assess whether the alleged corrective disclosures had a back-end price impact. *Id.* at 5.

The parties further disputed the applicable standard for rebutting the *Basic* presumption—a critical question because Plaintiffs concededly never tried to affirmatively prove price impact. Ex. 5 at 2.

CenturyLink observed that this Court in *Best Buy* addressed the applicable burden and ruled that defendants rebut the *Basic* presumption when they “‘produce[] evidence’ contrary to the presumption under Federal Rule of Evidence 301.” *Id.* at 2. CenturyLink further argued that defendants can rebut the presumption by producing sufficient front-end *or* back-end evidence, noting that *Best Buy* reversed a certification order based on front-end evidence alone. *Id.* at 3–4.

Relying on out-of-circuit case law, Plaintiffs urged the district court to ignore this Court’s articulation of a burden of production in *Best Buy* because that case purportedly “did not depend on the standard of proof.” Ex. 6 at 3. Plaintiffs thus argued that CenturyLink must affirmatively “demonstrate[] a complete lack of price impact” to rebut the *Basic* presumption. *Id.* Plaintiffs further contended that CenturyLink must conclusively disprove price impact on both the front end and the back end—again relying on out-of-circuit precedent instead of *Best Buy*. Ex. 4 at 2–3.



**C. The District Court Dismisses *Best Buy* as Dictum, Declines to Consider CenturyLink’s Evidence, and Orders Class Certification.**

The district court held that CenturyLink failed to rebut the *Basic* presumption and certified Plaintiffs’ proposed class.

The district court first stated that defendants seeking to rebut the *Basic* presumption must satisfy a burden of persuasion, holding that CenturyLink had to “affirmatively disprove” price impact. Order at 30–31. Although the district court recognized that *Best Buy* had articulated a lower “burden of production” standard, the district court nevertheless followed the Second Circuit’s view that this holding was “dictum.” *Id.* at 30 (quoting *Waggoner v. Barclays PLC*, 875 F.3d 79, 103 n.36 (2d Cir. 2017)). And in a further departure from *Best Buy*, the district court stated that “[d]efendants must affirmatively disprove **both**” front-end and back-end impact. *Id.* at 31 (emphasis added).

While the district court alternatively stated in passing that CenturyLink could not satisfy a burden of production, the court did not actually apply that lower standard. A burden of production only requires a party to introduce “some evidence” supporting its position, *Clay v. Traders Bank of Kansas City*, 708 F.2d 1347, 1351 (8th Cir. 1983), but the district court declined to find the presumption rebutted because CenturyLink did not **conclusively disprove** any possibility of price impact—a substantially higher bar than a burden-of-production standard.

Specifically, the district court rejected CenturyLink’s front-end evidence because Plaintiffs had “provided evidence of back-end price impact” in the form of a stock price drop, Plaintiffs were “proceeding under a price maintenance theory,” and CenturyLink’s expert did not offer an affirmative opinion on the ultimate question of price impact. Order at 31–35. The court accordingly did not analyze any of Defendants’ evidence showing no impact, which more than sufficed to satisfy a burden-of-production standard. Indeed, the court ended its discussion of the front-end evidence by quoting a Third Circuit case stating that “plaintiffs do not have the burden to prove price impact (or lack thereof)”—confirming that the court had followed out-of-circuit authority, not *Best Buy*, in placing the ultimate burden of persuasion on CenturyLink. Order at 35 (quoting *Vizirgianakis v. Aeterna Zentaris, Inc.*, 775 F. App’x 51, 53 (3d Cir. 2019)).

The district court likewise did not consider whether CenturyLink’s back-end evidence met the burden of production. The court stated that statistically significant price drops following corrective disclosures are alone “sufficient” to “prevent” rebutting the *Basic* presumption, without explaining how that analysis squared with *Best Buy*, which found the presumption rebutted despite a statistically significant price drop. Order at 36. And the court again relied on out-of-circuit precedent to find CenturyLink’s evidence insufficient because its expert had not

completely disproven any connection between the back-end price drops and the alleged fraud. *Id.* at 39.

Despite upholding the *Basic* presumption based solely on back-end price drops, the district court further failed to consider whether the asserted corrective disclosures actually revealed any facts concealed by the alleged misstatements, as is necessary to find the disclosures relevant to price impact. *Id.* at 38–39. The court reasoned that resolution of that issue would establish whether loss causation exists, which “raises common class-wide issues.” *Id.* at 39. The district court additionally noted it had found Plaintiffs adequately pleaded loss causation for purposes of denying the motion to dismiss. *Id.* at 38–39. Because the court concluded that the issue of loss causation must await “adjudicat[ion] on a class-wide basis at summary judgment or trial,” it declined to consider whether this evidence showed a lack of price impact. *Id.* at 39.

## **REASONS FOR GRANTING THE PETITION**

### **I. THIS PETITION PRESENTS AN IMPORTANT OPPORTUNITY TO CLARIFY THE LAW GOVERNING CERTIFICATION IN SECURITIES CLASS ACTIONS.**

Under Rule 23(f), this Court has “unfettered discretion” to permit interlocutory appeals of orders granting class certification. Fed. R. Civ. P. 23(f) Advisory Committee’s Note (1998). Review is particularly warranted when “the certification decision turns on a novel or unsettled question of law,” *id.*, or “presents an unsettled and fundamental issue of law relating to class actions,” *Chamberlan v. Ford Motor Co.*, 402 F.3d 952, 959 (9th Cir. 2005).

Courts routinely grant review “when the appeal might facilitate development of the law on class certification.” *Rodriguez v. Nat’l City Bank*, 726 F.3d 372, 377 (3d Cir. 2013) (internal quotation omitted). This consideration carries particular force here, because “very few securities class actions are litigated to conclusion, so review of [a] novel and important legal issue may be possible only through the Rule 23(f) device.” *West v. Prudential Sec. Inc.*, 282 F.3d 935, 937 (7th Cir. 2002).

Applying that standard, this Court granted interlocutory review under Rule 23(f) in *Best Buy* to “[a]ddress[] an issue of first impression” in this Circuit—the appropriate application of price-impact analysis at the class-certification stage under *Halliburton II*. 818 F.3d at 777. Similarly, the Seventh Circuit recently

granted interlocutory review of a securities fraud class-certification decision raising questions about the standard for rebutting the *Basic* presumption, including whether courts may decline to consider back-end evidence of no price impact because it overlaps with a merits issue. *Allstate*, 966 F.3d at 613–14. The Seventh Circuit explained that review under Rule 23(f) was appropriate to answer “several challenging questions about how to apply the ‘*Basic*’ fraud-on-the-market presumption of reliance.” *Id.* at 600.

So too here, interlocutory review is warranted to address important class-certification questions that lower courts have considered unsettled following *Best Buy* and *Halliburton II*, including whether this Court’s articulation of the burden of proof to rebut the *Basic* presumption was mere dictum, and whether certification can be premised on the assertion of a “price maintenance” theory coupled with a back-end stock price decline, irrespective of the evidence a defendant produces to show no price impact as a factual matter. This Court should grant CenturyLink’s petition to clarify the standards governing certification in this commonly recurring situation and to ensure that district courts in this Circuit do not transgress the Supreme Court’s repeated admonition that defendants must have a meaningful “opportunity before class certification to defeat the presumption.” *Halliburton II*, 573 U.S. at 284.

**II. THERE IS AN IMMEDIATE NEED FOR THIS COURT TO CLARIFY WHETHER ITS ARTICULATION OF THE STANDARD FOR REBUTTING THE *BASIC* PRESUMPTION WAS “DICTUM.”**

*Best Buy* unambiguously stated that defendants seeking to rebut the *Basic* presumption need satisfy only a “burden of production” under Fed. R. Evid. 301, explaining:

[W]hen plaintiffs present[] a *prima facie* case that the *Basic* presumption applies to their claims, defendants ha[ve] the ***burden to come forward with evidence*** showing a lack of price impact. See Fed. R. Evid. 301 (“the party against whom a presumption is directed has ***the burden of producing evidence to rebut the presumption***”).

818 F.3d at 782 (emphasis added).

Despite this clear standard, courts have disagreed on how to interpret *Best Buy*. Multiple courts have correctly read *Best Buy* to mean what it says: defendants have a “burden of production.” See *Bing Li v. Aeterna Zentaris, Inc.*, 324 F.R.D. 331, 344 (D.N.J. 2018) (“the defendant bears the burden of producing evidence to rebut the presumption”) (citing *Best Buy* and Rule 301); *KBC Asset Mgmt. NV v. 3D Sys. Corp.*, No. CV0:15-2393-MGL, 2017 WL 4297450, at \*8 (D.S.C. Sept. 28, 2017) (same); see also *Ohio Pub. Emps.’ Ret. Sys. v. Fed. Home Loan Mortg. Corp.*, No. 4:08CV0160, 2018 WL 3861840, at \*18 (N.D. Ohio Aug. 14, 2018) (citing *Best Buy*, holding that plaintiffs “ha[ve] the burden of persuasion as an evidentiary matter,” and finding the *Basic* presumption rebutted).

Other courts, however, have misread *Best Buy* and declined to apply a burden of production. In *Waggoner*, the Second Circuit dismissed this Court’s statements as “dictum,” and further stated that it disagreed with *Best Buy* “[t]o the extent that the Eighth Circuit imposed only a burden of production.” 875 F.3d at 103 n.36. More recently, the Seventh Circuit applied a burden of persuasion and, notwithstanding this conflict with *Best Buy*, stated it did not believe its analysis was “fundamentally inconsistent with that of the Eighth Circuit.” *Allstate*, 966 F.3d at 610 n.4. A pending petition for Supreme Court review highlights this circuit split and relies on *Best Buy* to argue that “a defendant seeking to rebut the *Basic* presumption has only a burden of production” and not “the ultimate burden of persuasion.” *Goldman Sachs Group, Inc. v. Arkansas Teacher Retirement Sys.*, 2020 WL 5040492, at \*I, \*21–\*23 (Aug. 25, 2020).

Here, Plaintiffs invoked out-of-circuit authority to persuade the district court to follow the Second Circuit’s decision in *Waggoner* instead of this Court’s decision in *Best Buy*. Quoting the Second Circuit, the district court characterized *Best Buy*’s statement of the burden as “dictum” without further scrutiny. Interlocutory review is thus necessary to clarify that this Court meant what it said in *Best Buy*: a defendant seeking to rebut the *Basic* presumption faces a burden of production, not the burden of persuasion to disprove price impact.

That standard makes good sense. Federal Rule of Evidence 301 governs how “all presumptions” operate. *St. Mary’s Honor Ctr. v. Hicks*, 509 U.S. 502, 507 (1993); *see also Lupyan v. Corinthian Colls. Inc.*, 761 F.3d 314, 320 (3d Cir. 2014) (Rule 301 “provides the default rule” for presumptions in civil cases). *Basic* itself cited to this rule when first announcing the presumption. 485 U.S. at 990–91 (citing Rule 301 and noting “presumptions are also useful devices for allocating the burdens of proof between parties”). Under Rule 301, “[i]f the defendant carries [a] burden of production, the presumption raised by the prima facie case is rebutted, and drops from the case.” *St. Mary’s*, 509 U.S. at 507 (internal quotations omitted); *see also Clay*, 708 F.2d at 1351 (“Clearly, the ultimate burden of persuasion is not shifted by the existence of [a] presumption.”).

This understanding of the *Basic* presumption accords with *Halliburton II*, which emphasized, consistent with Rule 301, that “[t]he *Basic* presumption does not relieve plaintiffs of the burden” of “proving” class-wide reliance under Rule 23. 573 U.S. at 275. The Court further emphasized that “[e]ven if plaintiffs need not directly prove price impact to invoke the *Basic* presumption ... defendants should at least be allowed to defeat the presumption at the class certification stage through *evidence* that the misrepresentation did not in fact affect the stock price.” *Id.* at 279 (emphasis added).



Based on the Second Circuit’s erroneous analysis, the district court departed from this framework and imposed a more onerous burden on CenturyLink to conclusively rule out price impact. This Court should grant review under Rule 23(f) to clarify for district courts in this Circuit that *Best Buy* controls.

**III. THERE IS AN IMMEDIATE NEED FOR THIS COURT TO CLARIFY THAT DISTRICT COURTS MUST ASSESS DEFENDANTS’ FRONT-END EVIDENCE OF NO PRICE IMPACT.**

Although the district court alternatively stated that CenturyLink’s front-end evidence would not satisfy even a burden of production, it reached that conclusion without actually applying that lower standard.

The district court never analyzed whether CenturyLink’s front-end evidence satisfied a burden of production—that is, whether CenturyLink had introduced “some evidence” supporting its position that the alleged misstatements did not affect the price of its securities. *Clay*, 708 F.2d at 1351. CenturyLink produced undisputed evidence that a price increase followed the alleged misstatements less than 10% of the time and that its stock price was twice as likely to have gone down rather than up on the relevant dates. Order at 32. Courts have found the *Basic* presumption rebutted on substantially the same evidence. *See Ohio Pub.*, 2018 WL 3861840, at \*13, \*18 (presumption rebutted based on lack of positive movement on 22 out of 23 dates); *In re Zonagen, Inc. Sec. Litig.*, 322 F. Supp. 2d 764, 780–81 (S.D. Tex. 2003) (defendant “rebutted the presumption of reliance by

presenting evidence that none of the statements ... had an effect on the stock price”).

The district court declined to consider this evidence for three reasons. First, the court again accepted Plaintiffs’ invitation to rely on out-of-circuit case law and stated that, to rebut the *Basic* presumption, defendants “must affirmatively disprove **both**” front-end and back-end impact “to satisfy their burden.” Order at 31 (citing *Ark. Teacher Ret. Sys. v. Goldman Sachs Grp., Inc.*, 955 F.3d 254 (2d Cir. 2020)). But that ruling contravenes *Halliburton II*’s declaration that the presumption can be rebutted by “evidence that the asserted misrepresentation (**or** its correction) did not affect the market price of the defendant’s stock,” 573 U.S. at 279–80 (citation omitted and emphasis added)—a disjunctive standard. Indeed, *Best Buy* applied *Halliburton II* to vacate a certification order based on front-end evidence alone, notwithstanding a back-end stock drop. 818 F.3d at 780–83.

Second, the district court did not consider CenturyLink’s front-end evidence because “Plaintiffs are proceeding under a price maintenance theory.” Order at 33. The court relied on the Second Circuit’s *Goldman* decision to assert that, following *Halliburton II*, no district court has rejected class certification when the plaintiff alleged both a price-maintenance theory and a stock price drop. Order at 34. But the Second Circuit was wrong. This Court in *Best Buy* expressly rejected the plaintiffs’ argument that the “price drop” following an alleged corrective

disclosure “was evidence of the requisite price impact—***maintaining*** an inflated stock price” because “that theory” did not refute the defendants’ evidence. 818 F.3d at 782–83 (emphasis added).<sup>2</sup> And at least one district court has agreed with this Court that defendants may rebut the *Basic* presumption even when plaintiffs assert a price-maintenance theory based on a stock price drop following asserted corrective disclosures. *Ohio Pub.*, 2018 WL 3861840, at \*18 (“A theory that statements maintained an inflated stock price is not evidence that can refute otherwise overwhelming evidence of no price impact.”).<sup>3</sup>

Third, the district court deemed it significant that CenturyLink’s expert did not opine on the ultimate question of price impact. Order at 35. But a defendant does not need to provide an expert opinion on that ultimate issue to satisfy its burden to produce “some evidence” under *Best Buy*. See Section II, *supra*.

The district court’s repeated reliance on out-of-circuit authorities that conflict with *Best Buy* resulted in an erroneous certification decision that, if

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<sup>2</sup> The decision below did not rely on Plaintiffs’ claim that the facts here differ from *Best Buy*. See Ex. 4 at 10. Nor could that claim render irrelevant *Best Buy*’s rulings that: (1) a burden of production applies; (2) front-end evidence alone can rebut the *Basic* presumption; and (3) a price-maintenance theory plus a stock drop alone does not automatically satisfy a plaintiff’s ultimate burden of persuasion. While the application of these rules may be fact-specific, this Court should make clear that district courts in this Circuit must follow them.

<sup>3</sup> While the district court stated that “the Supreme Court cited, with approval” a case in which a price maintenance theory was asserted, Order at 34, the Supreme Court has never actually endorsed or accepted this theory.

permitted to stand, will effectively prevent defendants from rebutting the *Basic* presumption any time plaintiffs allege “price maintenance” and a stock price drop. As a practical matter, plaintiffs only bring securities fraud class actions following price drops. And plaintiffs can always claim “price maintenance”—as Plaintiffs did here only after CenturyLink amassed substantial front-end evidence of no price impact. This Court should grant review to reaffirm its holding that plaintiffs cannot overcome defendants’ front-end evidence and obtain class certification solely by pointing to a stock price drop combined with a price-maintenance theory of fraud.

**IV. THERE IS AN IMMEDIATE NEED TO CLARIFY THAT DISTRICT COURTS CANNOT IGNORE BACK-END EVIDENCE OF NO PRICE IMPACT THAT OVERLAPS WITH MERITS ISSUES.**

Review is further warranted to clarify that district courts may not decline to analyze a defendant’s back-end evidence because it overlaps with merits issues—especially where plaintiffs allege a “price maintenance” theory premised on the notion that price impact may *only* be observed on the back end.

Here, the decision below tabled CenturyLink’s back-end evidence because it overlapped with loss causation issues. CenturyLink had argued that the asserted corrective disclosures did not actually reveal any facts concealed by the alleged misstatements—an argument that, if accepted, would have shown no back-end price impact and no class-wide reliance. But the court declined to consider this

evidence because it also would show no loss causation—a merits issue raising “common questions that can be adjudicated on a class-wide basis at summary judgment or trial.” Order at 39.

That analysis conflicts with *Halliburton II*, which held that courts must not refuse to consider price-impact evidence at class certification merely because the evidence is also relevant to “the merits” of an issue common to the class. 573 U.S. at 282–83. Following the Supreme Court’s direction, the Seventh Circuit recently granted interlocutory review in a price maintenance case and vacated a district court’s certification order based on this exact error, explaining:

A district court deciding whether the *Basic* presumption applies must consciously avoid deciding materiality and loss causation. ... At the same time, a district court must be willing to consider evidence offered by the defense to show that the alleged misrepresentations did not actually affect the price of the securities. ... And ***yes, the same evidence is likely to have obvious implications for the off-limits merits issues of materiality and loss causation.*** *Halliburton II* teaches, however, that ***a district court may not use the overlap to refuse to consider the evidence.*** The court must still consider the evidence as relevant to price impact.

*Allstate*, 966 F.3d at 608 (7th Cir. 2020) (emphasis added).

The district court here additionally reasoned that it could not consider this evidence because it previously found Plaintiffs had adequately pleaded loss causation when denying CenturyLink’s motion to dismiss. Order at 38–39. But “Rule 23 does not set forth a mere pleading standard.” *Wal-Mart Stores, Inc. v. Dukes*, 564 U.S. 338, 350 (2011). Rather, plaintiffs “must satisfy” the Rule 23

requirements “through evidentiary proof.” *Comcast Corp. v. Behrend*, 569 U.S. 27, 33 (2013). Thus, denial of a motion to dismiss does not signify that Plaintiffs have satisfied their evidentiary burden to show price impact for purposes of certifying the class.

Critically, if evidence that negates price impact can be disregarded at class certification simply because it also touches on loss causation or other merits issues—as virtually all back-end price-impact evidence does—then defendants can never rebut the *Basic* presumption. That result—which makes certification a foregone conclusion in any price maintenance case—is untenable. It impermissibly transforms *Basic* into an irrebuttable presumption. It conflicts with *Best Buy* and *Halliburton II*. And it should not be permitted to stand. This Court should grant interlocutory review under Rule 23(f) and clarify that even in price maintenance cases, district courts must consider defendants’ evidence under the correct legal framework to ensure the defendants have a meaningful “opportunity before class certification to defeat the presumption through evidence that an alleged misrepresentation did not actually affect the market price of the stock.” *Halliburton II*, 573 U.S. at 284.

**CONCLUSION**

For these reasons, CenturyLink's Rule 23(f) petition for interlocutory review should be granted.

Dated: September 28, 2020

Respectfully submitted,

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**CERTIFICATE OF COMPLIANCE**

1. This brief complies with the type-volume limitation of Fed. R. App. P. 5(c)(1) because this brief contains 5,198 words, as determined by the word-count feature of Microsoft Office Word, excluding the parts of the brief exempted by Fed. R. App. P. 32(f);

2. This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type style requirements of Rule 32(a)(6) because this brief has been prepared in a proportionally-spaced typeface using Microsoft Office Word in 14-point font size in Times New Roman typeface; and

3. Additionally, the undersigned counsel certifies under Eight Circuit Rule 28A(h)(2) that this Petition, and all attachments thereto, have been scanned for computer viruses and that the documents are virus free.

/s/ Thomas H. Boyd

**CERTIFICATE OF SERVICE**

The undersigned certifies that on September 28, 2020, the foregoing Petition, and all attachments thereto, are being delivered by electronic mail to all of the email addresses listed below, comprised of parties and counsel from Case No. 0:17-md-02795-MJD and Case No. 0:18-cv-00296-MJD.

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**UNITED STATES DISTRICT COURT  
DISTRICT OF MINNESOTA**

IN RE: CENTURYLINK SALES  
PRACTICES AND SECURITIES  
LITIGATION

MDL No. 17-2795 (MJD/KMM)

This Document Relates to  
Civil File No. 18-296 (MJD/KMM)

**MEMORANDUM OF LAW & ORDER**

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**I. INTRODUCTION**



This matter is before the Court on Plaintiffs’ Motion for Class Certification, Appointment of Class Representatives and Appointment of Class Counsel.

[Docket No. 188] Lead Plaintiff the State of Oregon by and through the Oregon State Treasurer and the Oregon Public Employee Retirement Board, on behalf of the Oregon Public Employee Retirement Fund (“Oregon”) and named Plaintiff Fernando Alberto Vildosola, as trustee for the AUFV Trust U/A/D 02/19/2009 (“Vildosola,” and collectively with Lead Plaintiff, “Plaintiffs”), move under Federal Rules of Civil Procedure 23(a) and 23(b)(3) to certify this action as a class action and to appoint Plaintiffs as Class Representatives, and, pursuant to Federal Rule of Civil Procedure 23(g), to appoint Bernstein Litowitz Berger & Grossmann LLP (“Bernstein Litowitz”) and Stoll Stoll Berne Lokting & Shlachter P.C. (“Stoll Berne”) as Class Counsel. The Court heard oral argument on July 29, 2020.

## **II. BACKGROUND**

### **A. Factual Background**

#### **1. The Parties**

Defendant CenturyLink, Inc. (“CenturyLink”) is the country’s third-largest telecommunications company with millions of customers. ([Docket No. 143] Consolidated Securities Class Action Complaint (“Compl.”) ¶¶ 28, 37.) Glen F.

Post, III; R. Stewart Ewing, Jr.; David D. Cole; Karen Puckett; Dean J. Douglas; and G. Clay Bailey (collectively, the “Executive Defendants”) held senior positions at CenturyLink during the relevant time. (Id. ¶¶ 29-34.)

Oregon operates and oversees public funds for the benefit of retired public employees. (Compl. ¶ 26.) The Oregon Public Employee Retirement Fund is a state pension fund for retired public employees. (Id.) It had \$77 billion in assets under management as of April 30, 2018. (Id.) Oregon purchased CenturyLink securities during the Class Period. (Id.)

Vildosola is trustee for the AUFV Trust U/A/D 02/19/2009. (Id. ¶ 27.) AUFV Trust U/A/D 02/19/2009 purchased CenturyLink’s 7.60% Senior Notes due September 15, 2039 (“7.60% Senior Notes”) during the Class Period. (Id.)

## **2. Allegations in Plaintiffs’ Complaint**

According to Plaintiffs, for a number of years, CenturyLink engaged in systemic “cramming” of customer accounts, by adding services to customers’ accounts without authorization, deceiving customers about the prices they would be charged, and misquoting prices by failing to disclose that “bundles” included fees for optional services that the customers did not need or authorize. (Compl. ¶¶ 44, 64.) CenturyLink potentially overbilled 3.5 million customers,

representing over half of its broadband subscribers and one-third of its 12 million wireline subscribers. (*Id.* ¶¶ 65, 178.)

During the Class Period, Defendants told investors that CenturyLink’s sales practices were aboveboard and represented that it would never “plac[e] or record[] an order for our products and services for a customer without that customer’s authorization.” (Compl. ¶ 151.) Defendants represented that CenturyLink’s revenue growth in its consumer and small business segments was due to its focus on customer needs through its call centers, bundling service packages, and other strategies. (*Id.* ¶¶ 58-61.) These representations were important to investors because investors were concerned with CenturyLink’s ability to generate dependable cash flows in the face of customers abandoning traditional wireline telephone services that were the historical core of CenturyLink’s business. (*Id.* ¶¶ 55-56.) The representations were false because, in fact, CenturyLink’s revenues were materially increased by cramming. (*Id.* ¶¶ 93, 192.)

In May 2016, the Minnesota Attorney General issued a civil investigative demand to CenturyLink after receiving many consumer complaints of deceptive practices. (Compl. ¶ 141.) In October 2016, CenturyLink employee Heidi Heiser,

who had repeatedly raised concerns about CenturyLink's fraudulent business practices to her supervisors, asked Post, through an online message board, "why customers were being given multiple accounts and being billed for things they did not ask for." (*Id.* ¶ 146.) Two days later, Heiser was suspended and then fired for blowing the whistle. (*Id.* ¶ 147.)

On Friday, June 16, 2017, Bloomberg reported on Heiser's whistleblower lawsuit against CenturyLink, that she was fired after raising concerns about cramming with Post, and that she alleged that CenturyLink had charged many millions of dollars in unauthorized fees. (Compl. ¶¶ 152-53.) On Monday, June 19, 2017, Bloomberg reported on a consumer class action lawsuit on behalf of "potentially millions" of CenturyLink customers alleging billing misconduct that had been filed the day before. (*Id.* ¶¶ 158, 160.) On July 12, 2017, news reports disclosed that the Minnesota Attorney General had filed a fraudulent billing lawsuit against CenturyLink based on a year-long investigation that provided detail concerning CenturyLink's sales and billing practices and their financial impact. (*Id.* ¶¶ 163-68.)

Overall, Plaintiffs allege that Defendants made false and misleading statements on dozens of different dates during the Class Period and that 3

corrective disclosures were made, on June 16, 2017; June 19, 2017; and July 12, 2017. (*Id.* ¶¶ 190–263 & App. A.)

## **B. Procedural History**

On June 25, 2018, Lead Plaintiff Oregon and Plaintiff Vildosola filed a Consolidated Securities Class Action Complaint against Defendants CenturyLink and the Executive Defendants. [Docket No. 143] The Complaint alleges: Count 1: Violations of Section 10(b) of the Exchange Act and Rule 10b-5 Promulgated Thereunder (against Defendants CenturyLink, Post, Ewing, Cole, Puckett and Douglas); and Count 2: Violations of Section 20(a) of the Exchange Act (against Defendants Post, Ewing, Cole, Puckett, Douglas and Bailey).

On July 30, 2019, the Court denied Defendants’ Motion to Dismiss in its entirety. [Docket No. 180] In re CenturyLink Sales Practices & Sec. Litig., 403 F. Supp. 3d 712 (D. Minn. 2019).

Plaintiffs now seek to certify a class pursuant to Federal Rules of Civil Procedure 23(a) and 23(b)(3), consisting of:

all persons and entities that purchased or otherwise acquired publicly traded CenturyLink common stock or 7.60% Senior Notes due September 15, 2039, during the period between March 1, 2013 to July 12, 2017, inclusive (the “Class Period”), and who were damaged thereby (the “Class”).

The proposed Class excludes (i) Defendants; (ii) CenturyLink's affiliates and subsidiaries; (iii) the officers and directors of CenturyLink and its subsidiaries and affiliates at all relevant times; (iv) members of the immediate family of any excluded person; (v) heirs, successors, and assigns of any excluded person or entity; and (vi) any entity in which any excluded person has or had a controlling interest.

Plaintiffs also request that the Court appoint Bernstein Litowitz and Stoll Berne as Class Counsel.

### **III. DISCUSSION**

#### **A. Standard for Class Certification**

The class action serves to conserve the resources of the Court and the parties by permitting an issue that may affect every class member to be litigated in an economical fashion. Gen. Tel. Co. of the Sw. v. Falcon, 457 U.S. 147, 155 (1979). Whether an action should be certified as a class action is governed by Rule 23 of the Federal Rules of Civil Procedure.

To be certified as a class, plaintiffs must meet all of the requirements of Rule 23(a) and must satisfy one of the three subsections of Rule 23(b). The Rule 23(a) requirements for class certification are: (1) the putative class is so numerous that it makes joinder of all members impractical; (2) questions of law or fact are common to the class; (3) the class representatives' claims or defenses are typical of the claims or defenses of the class; and (4) the

representative parties will fairly and adequately protect the interests of the class.

In re St. Jude Med., Inc., 425 F.3d 1116, 1119 (8th Cir. 2005) (citing Fed. R. Civ. P.

23(a)) (footnote and other citations omitted).

Plaintiffs seek certification of a class under Rule 23(b)(3). Rule 23(b)(3) allows a class action when “the court finds that the questions of law or fact common to class members predominate over any questions affecting only individual members, and that a class action is superior to other available methods for fairly and efficiently adjudicating the controversy.”

The matters pertinent to these findings include:

(A) the class members’ interests in individually controlling the prosecution or defense of separate actions;

(B) the extent and nature of any litigation concerning the controversy already begun by or against class members;

(C) the desirability or undesirability of concentrating the litigation of the claims in the particular forum; and

(D) the likely difficulties in managing a class action.

Fed. R. Civ. P. 23(b)(3).

Rule 23 does not set forth a mere pleading standard. A party seeking class certification must affirmatively demonstrate his compliance with the Rule—that is, he must be prepared to prove

that there are in fact sufficiently numerous parties, common questions of law or fact, etc.

Wal-Mart Stores, Inc. v. Dukes, 564 U.S. 338, 350 (2011). At this stage, “[m]erits questions may be considered to the extent – but only to the extent – that they are relevant to determining whether the Rule 23 prerequisites for class certification are satisfied.” Amgen Inc. v. Conn. Ret. Plans and Trust Funds, 568 U.S. 455, 466 (2013) (citations omitted).

#### **B. Numerosity (Rule 23(a)(1))**

Numerosity is met when the proposed class is “so numerous that joinder of all members is impracticable.” Fed. R. Civ. P. 23(a)(1).

Numerosity has been met because CenturyLink had approximately 567 million shares of common stock issued and outstanding on average during the Class Period, and they were actively traded on the New York Stock Exchange (“NYSE”) at a weekly average of over 27.8 million shares, with an average weekly turnover of 4.9%. The 7.60% Senior Notes were actively traded on open, well-developed and efficient markets, had an amount outstanding of \$800 million at the end of the Class Period, and were held by at least 120 institutional investors. (Blatchley Decl., Ex. C, Hartzmark Report ¶¶ 25, 99, 105, 128;



Hartzmark Report, Exs. I, XI.) Defendants do not dispute that numerosity has been met.

### C. Commonality (Rule 23(a)(2))

Federal Rule of Civil Procedure 23(a)(2) requires that there are “questions of law or fact common to the class.”

Commonality requires the plaintiff to demonstrate that the class members have suffered the same injury. . . . Their claims must depend upon a common contention . . . . That common contention, moreover, must be of such a nature that it is capable of classwide resolution—which means that determination of its truth or falsity will resolve an issue that is central to the validity of each one of the claims in one stroke.

Wal-Mart Stores, Inc., 564 U.S. at 349–50 (citation omitted). “In securities fraud class actions, questions of misrepresentation, materiality and scienter are the paradigmatic common question[s] of law or fact.” In re DaimlerChrysler AG Sec. Litig., 216 F.R.D. 291, 296 (D. Del. 2003) (citation omitted).

Commonality has been met because Class members share a common legal theory – securities law violations – and are part of a common group – purchasers of CenturyLink shares or Notes. Common questions include whether Defendants’ public representations and omissions violated federal securities law and whether these misrepresentations and omissions caused Class members to

suffer a compensable loss. (See, e.g., Compl. ¶ 271.) Defendants do not dispute that commonality has been met.

#### D. Typicality (Rule 23(a)(3))

Typicality requires that “the claims or defenses of the representative parties are typical of the claims or defenses of the class.” Fed. R. Civ. P. 23(a)(3).

“The burden is fairly easily met so long as other class members have claims similar to the named plaintiff. Factual variations in the individual claims will not normally preclude class certification if the claim arises from the same event or course of conduct as the class claims, and gives rise to the same legal or remedial theory.” Alpern v. UtiliCorp United, Inc., 84 F.3d 1525, 1540 (8th Cir. 1996) (citations omitted).

Typicality has been met because Plaintiffs and Class members share common claims against Defendants. Plaintiffs, like Class members, purchased CenturyLink’s publicly traded securities during the Class Period at prices allegedly artificially inflated by Defendants’ misrepresentations and omissions. (Compl. ¶¶ 26-27, 270.) Plaintiffs further assert that, like Class members, they were then damaged when the price of those publicly traded securities declined after public disclosure of Defendants’ fraud. (Id.) Plaintiffs have claims that are typical of the claims of the Class, bring claims under the same federal securities

law, and seek the same relief as other Class members; thus, the typicality requirement is satisfied.

The Court rejects CenturyLink's arguments that Oregon is atypical because it is subject to unique defenses:

### **1. Investigation of CenturyLink's Billing Practices**

Defendants assert that, while Plaintiff Oregon was purchasing CenturyLink securities, the Oregon Attorney General and Oregon Department of Justice were conducting a law enforcement investigation of the alleged sales and billing practices that it now claims CenturyLink concealed. Thus, Defendants reason, throughout the Class Period, Oregon had unique access to information and an opportunity to uncover the alleged fraud.

There is no evidence that Plaintiff Oregon relied on nonpublic information in making its investment decisions with regard to CenturyLink. First, case law establishes that the Oregon DOJ is treated as a separate entity from the Oregon Public Employee Retirement Fund as well as the Oregon State Treasurer and the Oregon Public Employee Retirement Board. See Brown v. State of Or., Dep't of Corr., 173 F.R.D. 265, 268 (D. Or. 1997) ("Agencies of the State of Oregon are treated as separate entities [and] . . . knowledge of one agency is not imputed to

another agency.”). See also Wyler v. Korean Air Lines Co., Ltd., 928 F.2d 1167, 1171 (D.C. Cir. 1991) (holding it improper to charge one federal agency with knowledge of another federal agency “simply because both are components of the same . . . government”) (citations omitted). (See also Blatchley Decl., Ex. I, Viteri 30(b)(6) Dep. 24-25 (testifying that the Oregon Public Employee Retirement System Fund is its own legal entity).) Absent some evidence to the contrary, the knowledge of one entity is not imputed to another. Here, the only evidence in the record is that Plaintiff Oregon had no knowledge of the Oregon DOJ’s investigation. (See Blatchley Decl., Ex. I, Viteri 30(b)(6) Dep. 208-11; Blatchley Reply Decl. ¶¶ 2-5; Blatchley Decl., Ex. K, Shull Decl. ¶¶ 2-3.)

Second, Plaintiff Oregon made no trades in CenturyLink stock after the Oregon DOJ served the Civil Investigative Demand on CenturyLink and before the end of the Class Period. Thus, even if Oregon DOJ received pertinent, non-public information from CenturyLink and even if knowledge of that information were imputed to Plaintiff Oregon, it would be irrelevant for purposes of this lawsuit. (See Blair Decl., Ex. 5, June 21, 2017, Oregon Dept. of Justice Civil Investigative Demand to CenturyLink; Blair Decl., Ex. 7.)

## 2. Information Available to Oregon's External Investment Managers

Defendants also assert that Oregon relied on nonpublic information to make its trades because, during the Class Period, Oregon relied on external investment managers to actively manage Oregon's assets who, in turn, relied on "unique data sources or research that potentially adds value." (Blair Decl., Ex. 6, Viteri 30(b)(6) Dep. 129.) Defendants note that Oregon's investment strategy relied on selecting "active managers" who "implement[] market strategies that exploit dislocation." (Id. 149-50.)

The Court finds no merit in Defendants' argument. In context, Oregon's 30(b)(6) deponent testified that Oregon's investment managers used "public information" and that the "unique data sources or research" he mentioned were "publicly available" sources such as "lesser known trade publications." (Blatchley Decl., Ex. I, Viteri 30(b)(6) Dep. 129-30.) There is no evidence that Oregon had access to nonpublic information relevant to its purchases of CenturyLink shares.

## 3. Oregon's Purchases after June 16, 2017

The Court rejects Defendants' claim that Oregon's purchases after the June 16, 2017 partial disclosure make it subject to unique non-reliance defenses, which

will prevent it from serving as an effective class representative. Oregon purchased very few shares of CenturyLink after the disclosures, relative to the amount of shares it purchased before the disclosures. (See Blair Decl., Ex. 7.) In any case, the great weight of the authority provides that purchasing shares after a disclosure does not destroy typicality, because, in an efficient market, the investor still relies on the fact that the disclosure information will be absorbed by the market and reflected in the new share price. See Weiner v. Tivity Health, Inc., 334 F.R.D. 123, 130 (M.D. Tenn. 2020). “This later purchase does not undercut or diminish the argument that the same investor may have purchased the security pre-disclosure relying on the fact that all information available at the time was reflected in the then current price.” Id. (citation omitted). “Courts routinely certify a class with representatives who purchased stock during and after a class period.” In re Select Comfort Corp. Sec. Litig., 202 F.R.D. 598, 607 n.12 (D. Minn. 2001).

#### **4. Oregon’s Awareness of Defendants’ Statements**

The fact that Oregon did not personally read CenturyLink’s SEC filings but, instead, relied on outside investment managers and on the market price (see Blair Decl., Ex. 6, Viteri 30(b)(6) Dep. 215-16) does not make Oregon atypical

when the Class theory is fraud-on-the-market. Plaintiffs rely on a theory of liability and damages that depends on an efficient market that absorbs all of the information in CenturyLink’s SEC filings into the market price. The premise of the Basic presumption, which applies in an efficient market, is that direct reliance is not required. Oregon’s failure to personally read CenturyLink’s filings is irrelevant and does not make Oregon different from a typical Class member.

#### **E. Adequacy (Rule 23(a)(4))**

Named Plaintiffs are adequate representatives if they “have common interests with the members of the class, and . . . will vigorously prosecute the interests of the class through qualified counsel.” Paxton v. Union Nat. Bank, 688 F.2d 552, 562–63 (8th Cir. 1982).

#### **1. Adequacy of Plaintiffs**

Plaintiffs have established adequacy. Defendants’ argument against adequacy is a reiteration of their typicality argument, which the Court has already rejected. Plaintiffs’ declarations demonstrate that they have diligently pursued this litigation and will continue to do so. (See Blatchley Decl., Ex. D, De Haan Decl. ¶¶ 4-10; Blatchley Decl., Ex. E, Vildosola Decl. ¶¶ 4-10.)

Plaintiffs also have common interests with the proposed Class. Oregon purchased CenturyLink securities during the Class Period at prices that were allegedly artificially inflated by Defendants' misrepresentations and omissions. It then suffered significant damages when the price of CenturyLink's publicly traded securities declined when the truth was disclosed. Vildosola purchased CenturyLink's 7.60% Notes during the Class Period that were allegedly artificially inflated by Defendants' misrepresentations and omissions and was damaged when the price of those securities fell in response to corrective disclosures.

## **2. Class Counsel**

In appointing class counsel, the Court must consider "(i) the work counsel has done in identifying or investigating potential claims in the action; (ii) counsel's experience in handling class actions, other complex litigation, and the types of claims asserted in the action; (iii) counsel's knowledge of the applicable law; and (iv) the resources that counsel will commit to representing the class." Fed. R. Civ. P. 23(g)(1)(A).

The Court appoints Bernstein Litowitz and Stoll Berne as Class Counsel. Both firms are highly qualified and have extensive experience in securities class



action litigation. As demonstrated by the law firms' submissions, Stoll Berne and Bernstein Litowitz are experienced in leading large securities class actions in both trials and settlements and have obtained substantial recoveries for plaintiffs in such lawsuits. Both firms have demonstrated diligence and expertise in their work in this case. Defendants do not dispute that Bernstein Litowitz and Stoll Berne are qualified to represent the class.

**F. Predominance (Rule 23(b)(3))**

"At the core of Rule 23(b)(3)'s predominance requirement is the issue of whether the defendant's liability to all plaintiffs may be established with common evidence." Avritt v. Reliastar Life Ins. Co., 615 F.3d 1023, 1029 (8th Cir. 2010).

If, to make a prima facie showing on a given question, the members of a proposed class will need to present evidence that varies from member to member, then it is an individual question. If the same evidence will suffice for each member to make a prima facie showing, then it becomes a common question.

Id. (citations omitted).

Rule 23(b)(3), however, does not require a plaintiff seeking class certification to prove that each elemen[t] of [her] claim [is] susceptible to classwide proof. What the rule does require is that common questions predominate over any questions affecting only individual [class] members.

Amgen Inc. v. Conn. Ret. Plans & Trust Funds, 568 U.S. 455, 469 (2013) (citations omitted).

Plaintiffs note that “[p]redominance is a test readily met in certain cases alleging . . . securities fraud.” Amchem Prod., Inc. v. Windsor, 521 U.S. 591, 625 (1997). The predominance inquiry looks to the elements of the underlying causes of action. Erica P. John Fund, Inc. v. Halliburton Co., 563 U.S. 804, 809-10 (2011) (“Halliburton I”).

Because the Supreme Court has held that falsity, materiality, and loss causation are common issues to a class, Amgen, 568 U.S. at 474-75, predominance in a securities fraud action often turns on the reliance element. Halliburton I, 563 U.S. at 810.

### **1. Class-wide Reliance with the Basic Presumption**

Plaintiffs have shown that they are entitled to a presumption of classwide reliance under the fraud-on-the-market theory established in Basic, Inc. v. Levinson, 485 U.S. 224, 247 (1988), and reaffirmed in Halliburton Co. v. Erica P. John Fund, Inc., 573 U.S. 258, 283-84 (2014) (“Halliburton II”). Plaintiffs may satisfy Section 10(b)’s reliance element by “invoking a presumption that a public, material misrepresentation will distort the price of stock traded in an efficient

market, and that anyone who purchases the stock at the market price may be considered to have done so in reliance on the misrepresentation.” Halliburton II, 573 U.S. at 283-84. However, “defendants must be afforded an opportunity before class certification to defeat the presumption through evidence that an alleged misrepresentation did not actually affect the market price of the stock.” Id.

To invoke the Basic presumption, Plaintiff must establish that (1) the alleged misrepresentations were public; (2) the stock traded in an efficient market; and (3) the relevant transaction took place between the time the misrepresentations were made and the time the truth was revealed. Halliburton I, 563 U.S. at 811. The Basic presumption substitutes for individualized proof of each buyer’s reliance on the alleged misrepresentations. Basic, 485 U.S. at 242.

The fraud-on-the-market presumption is based on the “fairly modest premise that market professionals generally consider most publicly announced material statements about companies;” therefore, “the market price of shares traded on well-developed markets reflects all publicly available information, and, hence, any material misrepresentations.” Halliburton II, 573 U.S. at 268, 272

(citation omitted). Thus, “a buyer of the security may be presumed to have relied on that information in purchasing the security.” Amgen, 568 U.S. at 458.

“Basic [] establishes that a plaintiff satisfies that burden [of showing predominance] by proving the prerequisites for invoking the presumption—namely, publicity, materiality, market efficiency, and market timing.”

Halliburton II, 573 U.S. at 276. “Basic does afford defendants an opportunity to rebut the presumption of reliance with respect to an individual plaintiff by showing that he did not rely on the integrity of the market price in trading stock.” Id. “That the defendant might attempt to pick off the occasional class member here or there through individualized rebuttal does not cause individual questions to predominate.” Id.

Plaintiffs present evidence to show that the prerequisites for the Basic presumption – publicity, timing, and market efficiency – have been met. CenturyLink is a giant entity with millions of shares, closely followed by many analysts and traded on the NYSE. There is no plausible argument that CenturyLink’s statements were not publicly made, that Plaintiffs and Class members did not make trades after the statements were made but before the disclosures, or that CenturyLink stock was not traded in an efficient market.

**a) Publicity**

Plaintiffs meet the publicity prong because they allege that Defendants made material misrepresentations and omissions in their public statements to investors that artificially inflated or maintained the market price of CenturyLink's securities. (Compl. ¶¶ 276-77.)

**b) Timing**

Plaintiffs meet the market timing prong because they allege that they purchased CenturyLink securities during the Class Period and suffered losses when the artificial inflation came out of the price of those securities when the truth was disclosed. (Compl. ¶¶ 266-77.)

**c) Market Efficiency**

The markets for CenturyLink common stock and the 7.60% Senior Notes were efficient during the Class Period.

Courts analyze the efficiency of the market under the factors outlined in Cammer v. Bloom, 711 F. Supp. 1264, 1286 (D.N.J. 1989), and Krogman v. Sterritt, 202 F.R.D. 467, 478 (N.D. Tex. 2001). The Cammer factors address: "(1) a stock's average weekly trading volume; (2) the number of security analysts following and reporting on the stock; (3) the extent to which market makers and

arbitrageurs trade in the stock; (4) whether the company is eligible to file an SEC Form S-3; and (5) empirical facts showing a cause and effect relationship between unexpected corporate events or financial releases and an immediate response in the stock price.” Första AP-Fonden v. St. Jude Med., Inc., 312 F.R.D. 511, 518 (D. Minn. 2015) (citing Cammer, 711 F. Supp. at 1286-87). The Krogman factors are: “(6) the company’s market capitalization, (7) the bid-ask spread for stock sales, and (8) float (the percentage of shares held by the public, as opposed to insiders).” Första AP-Fonden, 312 F.R.D. at 518 (citing Krogman, 202 F.R.D. at 478). Courts also examine factors such as whether a stock shows “autocorrelation,” which measures “how predictable a stock’s pricing is based on historical data,” and whether a stock is traded on a major stock exchange. Id.

Here, throughout the Class Period, CenturyLink’s common stock was traded on the NYSE, a highly efficient securities market. (Blatchley Decl., Ex. C, Hartzmark Report ¶¶ 23, 37-38.)

The average weekly trading volume of the CenturyLink common stock was 4.9% of outstanding shares. (Hartzmark Report ¶ 25; id., Ex. I.) An “[a]verage weekly trading volume of 2% or more of outstanding securities justifies a ‘strong presumption’ of an efficient market for that security.” In re

Winstar Commc'ns Sec. Litig., 290 F.R.D. 437, 447 (S.D.N.Y. 2013) (citing Cammer, 711 F. Supp. at 1286). The 7.60% Senior Notes had an average weekly turnover rate of 2.5%, with a median of 1.8%, and traded on all possible trading days from the time it was issued during the Class Period. (Hartzmark Report ¶¶ 116-19; id., Exs. XI, XII.) Courts have held that bond turnover over 2% justifies a “strong presumption” of an efficient market. Winstar, 290 F.R.D. at 447.

Heavy coverage of CenturyLink by analysts and the media weighs in favor of market efficiency. During the Class Period, analysts hosted 38 investor conferences at which CenturyLink participated, and CenturyLink was discussed in approximately 11,500 published articles. (Hartzmark Report ¶¶ 29, 32; Ex. III-C; Appendix C.) During the Class Period, an average of 19 analysts covered CenturyLink per week. (Hartzmark Report ¶¶ 28, 31; Ex. II.) The number of analysts following CenturyLink was greater than at least 80% of the common stocks on the NYSE and NASDAQ. (Hartzmark Report ¶ 31.) Analysts closely watched CenturyLink, publishing over 1,000 reports and actively participating on 17 conference calls during the Class Period. (Hartzmark Report ¶¶ 28-29; Exs. III-A, III-B.) Analysts also issued numerous reports addressing CenturyLink's debt securities. (Hartzmark Report ¶¶ 122, 124.)

“The existence of market makers and arbitrageurs” is persuasive evidence of market efficiency because it “would ensure completion of the market mechanism; these individuals would react swiftly to company news and reported financial results by buying or selling stock and driving it to a changed price level.” Cammer, 711 F. Supp. at 1286-87. CenturyLink’s common stock was actively traded on the NYSE by at least 1,668 institutional investors during the Class Period. (Hartzmark Report ¶¶ 39-40; id., Exs. IV, V.) There were opportunities for arbitrage throughout the Class Period, because the amount of short interest in CenturyLink common stock ranged from 24.1 million shares to 114.9 million shares, with an average of 47.3 million shares. (Hartzmark Report ¶¶ 41-42; id., Ex. VI.) There were at least 343 separate market makers for the 7.60% Senior Notes during the Class Period. (Hartzmark Report ¶¶ 115, 126; id., Ex. XV.) More than 120 institutional investors held at least 21-33% of the 7.60% Senior Notes at year-end from 2013 to 2016. (Hartzmark Report ¶ 128; id., Ex. XVI.)

Eligibility to file an abbreviated SEC Form S-3 is probative of efficiency. 17 C.F.R. § 239.13; see Cammer, 711 F. Supp. at 1287. CenturyLink filed at least three Forms S-3 during the Class Period. (Hartzmark Report ¶¶ 43-45; 130-32.)



“Market capitalization, calculated as the number of shares multiplied by the prevailing share price, may be an indicator of market efficiency because there is a greater incentive for stock purchasers to invest in more highly capitalized corporations.” Krogman, 202 F.R.D. at 478. Throughout the Class Period, CenturyLink’s market capitalization averaged approximately \$17.9 billion, with a high of \$23.9 billion, meaning that CenturyLink’s market capitalization was generally greater than 89-95% of common stocks on the NYSE and NASDAQ. (Hartzmark Report ¶¶ 47-50; Ex. VII.) The 7.60% Senior Notes also had a high market value ranging from \$587 million to \$844 million during the class period. (Hartzmark Report ¶ 134; id., Exs. XIV, XVII.)

“In determining efficiency, courts also consider the percentage of shares held by the public, rather than insiders.” Krogman, 202 F.R.D. at 478. During the Class Period, the public float represented approximately 99.6% of CenturyLink’s common stock, on average. (Hartzmark Report ¶ 52.) There is no evidence that any insiders held any positions in the 7.60% Senior Notes. (Hartzmark Report ¶ 138.)

“The bid-ask spread is the difference between the price at which investors are willing to buy the stock and the price at which current stockholders are

willing to sell their shares. A large bid-ask spread is indicative of an inefficient market, because it suggests that the stock is too expensive to trade.” Krogman, 202 F.R.D. at 478 (citations omitted). During the Class Period, the average bid-ask spread for companies on the NYSE and NASDAQ (0.70%) was 17 times larger than the bid-ask spread for CenturyLink common stock (0.04%).

(Hartzmark Report ¶¶ 53-57.) There are no reported bid-ask spreads for corporate bond markets, so Plaintiff’s expert, Michael Hartzmark analyzed customer trades with reporting dealers and determined that the average bid-ask spread for the 7.60% Senior Notes was 2.48%, and the median bid-ask spread was 2.55%. (Hartzmark Report ¶¶ 140-41; id., Ex. XVIII.) He also analyzed potential market-making trades between dealers and determined that the average bid-ask spread for such trades was 1.09%, with a median bid-ask spread of 0.93%. (Hartzmark Report ¶ 143; id., Ex. XVII.)

Plaintiffs have “allege[d] empirical facts showing a cause and effect relationship between unexpected corporate events or financial releases and an immediate response in the stock price.” Cammer, 711 F. Supp at 1287.

Hartzmark conducted an event study. (Hartzmark Report ¶¶ 61-65; Apps. C, D.) “Event studies are ‘regression analyses that seek to show that the market price of

the defendant's stock tends to respond to pertinent publicly reported events.”

Första AP-Fonden, 312 F.R.D. at 520 n.4 (quoting Halliburton II, 573 U.S. 280).

Event studies are “considered prima facie evidence of the existence of this causal relationship.” Winstar, 290 F.R.D. at 448.

Hartzmark found that CenturyLink's common stock price exhibited significant price movements nine times as frequently on “news” days than on “no-news” days. (Hartzmark Report ¶ 73.) He found that there was no statistically significant autocorrelation of CenturyLink's common stock abnormal returns, which is consistent with the conclusion that CenturyLink common stock reacts quickly to unexpected events. (Hartzmark Report ¶¶ 79-84.) He also found statistically significant price movements in response to each corrective disclosure, which is consistent with a security that trades in an efficient market. (Hartzmark Report ¶¶ 80-84.) Hartzmark also concluded that new CenturyLink-specific information and large price movements of the 7.60% Senior Notes were related and could not be attributed to outside influences. Hartzmark Report ¶¶ 153-83.) The 7.60% Senior Notes responded to information about CenturyLink's credit rating in a manner consistent with a finding of an efficient market. (Hartzmark Report ¶¶ 157-66.) The relationship between 7.60% Note price

volatility and common stock volume (a proxy for CenturyLink-specific information) was positive and highly statistically significant, which also supports a finding of market efficiency. (Hartzmark Report ¶¶ 167-70.) The 7.60% Note did not exhibit economically meaningful autocorrelation. (Hartzmark Report ¶¶ 171-77.) Each corrective disclosure was associated with significant price movement in the price of the Senior 7.60% Notes, another finding consistent with market efficiency. (Hartzmark Report ¶¶ 178-81; Ex. XXI.) Together, these analyses support a finding of market efficiency for CenturyLink's common stock and the 7.60% Notes during the Class Period. (Hartzmark Report ¶¶ 85-87, 182.)

**d) Standard for Rebuttal of the Basic Presumption**

The Basic presumption can be rebutted with evidence that the alleged misrepresentation did not affect the stock's market price. Halliburton II, 573 U.S. at 279, 284. See also IBEW Local 98 Pension Fund v. Best Buy Co., Inc., 818 F.3d 775, 780 (8th Cir. 2016) (noting that "there is an additional question at the class certification stage — whether the Rule 10b–5 defendant can rebut the Basic presumption with evidence showing an absence of price impact"). "[T]he Basic presumption . . . c[an] be rebutted by appropriate evidence, including evidence that the asserted misrepresentation (or its correction) did not affect the market

price of the defendant's stock." Halliburton II, 573 U.S. at 279–280. To prevail on their argument of lack of price impact, Defendants must show that they have "sever[ed] the link" between the alleged misrepresentations and any impact on CenturyLink's stock price. Basic Inc., 485 U.S. at 248; Halliburton II, 573 U.S. at 281-82 (holding that defendant must "show[] that the alleged misrepresentation[s] did not actually affect the stock's market price").

In Best Buy, the Eighth Circuit reversed class certification because the defendants presented "overwhelming evidence of no 'front-end' price impact" "by submitting direct evidence (the opinions of both parties' experts) that severed any link between the alleged conference call misrepresentations and the stock price at which plaintiffs purchased." Best Buy Co., 818 F.3d at 782-83. In its opinion, the Best Buy court stated: "We agree with the district court that, when plaintiffs presented a prima facie case that the Basic presumption applies to their claims, defendants had the burden to come forward with evidence showing a lack of price impact." Id. at 782 (citing Fed. R. Evid. 301). However, "[t]he Eighth Circuit's statement appears to be dictum because the extent of the burden was not at issue. The Eighth Circuit ultimately concluded that the 'overwhelming evidence' in the case demonstrated that there had been no price

impact and that the Basic presumption had therefore been rebutted. Thus, the Eighth Circuit’s ruling did not depend on the standard of proof.” Waggoner v. Barclays PLC, 875 F.3d 79, 103 n.36 (2d Cir. 2017). In any event, even if the standard were a mere burden of production, in this case, Defendants have failed to meet that burden because they have failed to produce evidence to sever the link between the alleged misrepresentations and any impact on CenturyLink’s stock price.

Because price impact can be observed on the “front-end” (i.e., misstatements causing or maintaining inflation) or on the “back-end” (i.e., a decline in price caused by the corrective disclosures), Defendants must affirmatively disprove both to satisfy their burden. See Ark. Teacher Ret. Sys. v. Goldman Sachs Grp., Inc., 955 F.3d 254, 265–66, 271 (2d Cir. 2020) (rejecting argument that absence of price movement on misstatement days rebutted price impact because “inflation was demonstrated on the [corrective-disclosure] dates”); In re Vivendi, S.A. Sec. Litig., 838 F.3d 223, 260 (2d Cir. 2016) (rejecting notion that price impact requirement means a “misstatement must be associated with an increase in inflation to have any effect on a company’s stock price”).

#### e) Evidence of Front-End Price Impact

Defendants' expert, Bruce Deal, opined that, on 48 out of the 52 days for which Plaintiffs allege CenturyLink's misrepresentations affected the price of CenturyLink securities, there was no statistically significant positive price movement in CenturyLink stock. (Blair Decl., Ex. 1, Deal Report ¶ 72.) He further opined that there was a statistically significant price increase on 4 dates and a statistically significant negative price movement on 8 of the 52 dates. (Id. ¶ 77.) He opined that, on 3 of the 4 dates showing a statistically significant increase, CenturyLink disclosed revenue and earnings-per-share figures that were more positive than the market expected. (Id. ¶¶ 73-76.)

Defendants argue that, although Hartzmark opines that four abnormal positive returns are "four times as many as would be expected by chance," (Blatchley Reply Decl., Ex. F, Hartzmark Reply Report ¶ 115), he also opines that "unanticipated material information is more frequently and more systematically disclosed" on earnings disclosure "news days," leading to higher rates of abnormal returns, in the case of CenturyLink, 59% of the time (Blatchley Decl., Ex. C, Hartzmark Report ¶ 68; Hartzmark Report, Ex. IX). Defendants conclude that, because 17 of the purported inflationary dates are "news days," the average

distribution by chance would likely include more positive abnormal returns than those among Hartzmark's purported inflationary dates.

The Court concludes that the fact that CenturyLink shares did not show a statistically significant increase on the majority of the dates of the alleged misstatements or omissions does not rebut the Basic presumption at this stage, where Plaintiffs are relying on a price maintenance theory.

First, Plaintiffs have provided evidence of back-end price impact. As the Seventh Circuit has noted, "the movement of a stock price immediately after a false statement often tells us very little about how much inflation the false statement caused." Glickenhau & Co. v. Household Int'l, Inc., 787 F.3d 408, 415 (7th Cir. 2015). Instead, "[t]he best way to determine the impact of a false statement is to observe what happens when the truth is finally disclosed and use that to work backward, on the assumption that the lie's positive effect on the share price is equal to the additive inverse of the truth's negative effect." Id. Here, as discussed in the next section, Plaintiffs have provided, and Defendants have failed to rebut, evidence of back-end price impact.

Second, Plaintiffs are proceeding under a price maintenance theory. As Defendants' expert admitted, misstatements or omissions can maintain artificial



inflation in a stock regardless of whether a stock's price increases significantly, decreases significantly, or does neither. (Blatchley Decl., Ex. H, Deal Dep. 123-35.) "The lack of statistically significant proof that a statement affected the stock price is not statistically significant proof of the opposite, i.e., that it did not actually affect the stock price." Di Donato v. Insys Therapeutics, Inc., 333 F.R.D. 427, 444 (D. Ariz. 2019). "[A] stock can be inflated even if the price remains the same or declines after a false statement because the price might have fallen even more." Glickenhau & Co., 787 F.3d at 415. While the Eighth Circuit has not explicitly endorsed the price maintenance theory, it has not rejected the theory. The underlying theory in Haliburton II was price maintenance, and the Supreme Court cited, with approval, Schleicher v. Wendt, which endorsed price maintenance. 618 F.3d 679, 684 (7th Cir. 2010), quoted in Haliburton II, 573 U.S. at 272. After Haliburton II, 70% of securities plaintiffs in federal district court cases involving a defendant's attempt to rebut the Basic presumption proceeded on a price maintenance theory, and in every one of those cases, the district courts held that the defendants failed to rebut the presumption. Goldman Sachs Group, Inc., 955 F.3d at 266 n.9.

Here, Plaintiffs allege that Defendants engaged in cramming in order “to meet the financial projections Defendants provided to Wall Street.” (Compl. ¶¶ 2, 67.) Fees and charges were added to customer bills, including as “gap closure[s]” and to meet analyst estimates. (Blatchley Decl., Sealed Ex. U; Second Blatchley Decl. ¶¶ 6-7.) Additionally, the Complaint alleges that Defendants omitted negative material facts (see, e.g., Compl. ¶¶ 200, 203), which Deal agreed would not result in price increases. (Blatchley Decl., Ex. H, Deal Dep. 135; Blatchley Decl., Sealed Ex. F, Hartzmark Rebuttal Report ¶¶ 101-03.)

Third, Defendants bear the burden of producing evidence capable of rebutting the Basic presumption, yet their own expert testified that he did not opine that the alleged misstatements did not have a price impact. (See Blatchley Sur-sur-reply Decl., Ex. X, Deal Dep. 65.) Thus, Defendants did not produce evidence of a lack price impact. See, e.g., Vizirgianakis v. Aeterna Zentaris, Inc., 775 F. App’x 51, 53 (3d Cir. 2019) (noting that “plaintiffs do not have the burden to prove price impact (or lack thereof), so it was not surprising that their expert’s report did no such thing”).

#### **f) Evidence of Back-End Price Impact**

Defendants have failed to rebut the Basic presumption because they are unable to rebut evidence of back-end price impact.

First, Defendants' expert admits that there were statistically significant price drops following two of the three disclosure dates. This is sufficient to prevent Defendants from "sever[ing] the link" between the alleged misrepresentations and any impact on CenturyLink's stock price. See, e.g., Monroe County Employees' Ret. Sys. v. S. Co., 332 F.R.D. 370, 395 (N.D. Ga. 2019) ("This concession [that Defendants cannot rule out price impact because the stock price decline following at least one Class Period corrective disclosure was statistically significant] dooms Defendants' attempt to rebut the presumption of reliance because the inquiry is whether Defendants have proven a complete lack of price impact during the Class Period, not whether the stock price decline following individual corrective disclosures was caused by the alleged misrepresentations, which is a loss causation analysis not appropriate at this stage."). Deal admits that the price declines on June 16, 2017, and July 12, 2017, were statistically significant and that there was a negative abnormal decline on the third date, June 19, 2017. (Deal Report ¶¶ 141-45; Blatchley Decl., Ex. F, Hartzmark Rebuttal Report ¶¶ 21-22; Blatchley Decl., Ex. H, Deal Dep. 90-91

(“[B]oth Dr. Hartzmark and I find statistically significant negative abnormal returns on June 16th and July 12th.”.) Deal did not identify any confounding information disclosed on the corrective disclosure dates and did not analyze whether any of the price decline on those days was unrelated to the fraud. (Blatchley Decl., Ex. F., Hartzmark Rebuttal Report ¶¶ 11-12, 46-68; Blatchley Decl., Ex. H, Deal Dep 164-65.) Yet, under Basic, Defendants bear the burden of presenting evidence to show “that the entire price decline on the corrective-disclosure dates was due to something other than the corrective disclosures.” Ark. Teacher Ret. Sys. v. Goldman Sachs Grp., Inc., 955 F.3d 254, 271 (2d Cir. 2020). Even under a lesser burden of production, not persuasion, Defendants fail to rebut the Basic presumption. See, e.g., KBC Asset Mgmt. NV v. 3D Sys. Corp., No. CV 0:15-2393-MGL, 2017 WL 4297450, at \*8 (D.S.C. Sept. 28, 2017) (“On the record before it, the Court is unable to say Defendants have presented evidence sufficient to convince it there was no price impact associated with the May 6, 2015 disclosure. In fact, 3D Systems’s stock price decreased by over five percent on May 6, 2015. Whether the stock price was caused by alleged misrepresentations or some other factor is for now an open question.”) (applying Fed. R. Evid. 301 burden of production standard); Marcus v. J.C. Penney Co.,

CIVIL ACTION NO. 6:13-cv-736-MHS-KNM, 2016 WL 8604331, at \*7-8 (E.D. Tex. Aug. 29, 2016) (concluding that the defendants failed to meet a “burden of production to rebut the presumption of reliance,” even though there were no front-end price increases on misstatement dates, because the stock declined following corrective disclosures, thereby showing price impact, so it was “not necessary to reach the question of whether [defendants] also bear the burden of persuasion”), adopted, 2017 WL 907996 (E.D. Tex. Mar. 8, 2017).

Second, Defendants’ expert admits that there was a negative abnormal decline on June 19, 2017, but merely disagrees with Plaintiffs’ expert regarding whether it is statistically significant, which depends on whether 94% confidence is considered sufficient and whether a one or two-day window is used.

(Hartzmark Rebuttal Report ¶¶ 69-73.) Plaintiffs’ expert provides reasonable arguments regarding why a two-day window is appropriate for the June 19 disclosure, including that the disclosure was late in the day and made by a third party. (See Hartzmark Rebuttal Report ¶¶ 74-94; Blatchley Decl., Ex. H, Deal Dep. 190-212.)

Third, the Court has already rejected Defendants’ argument that, as a matter of law, the three disclosures were not actually disclosures. See In re

CenturyLink Sales Practices & Sec. Litig., 403 F. Supp. 3d 712, 735-36 (D. Minn. July 30, 2019) (“Plaintiffs have adequately pled loss causation” in alleging the truth was revealed “through news reports on the lawsuits alleging systemic cramming at CenturyLink.”). Moreover, arguments about whether particular statements were actually disclosures, like arguments about loss causation and that the market already was aware of cramming allegations, are common questions that can be adjudicated on a class-wide basis at summary judgment or trial. See, e.g., Amgen Inc. v. Connecticut Ret. Plans & Tr. Funds, 568 U.S. 455, 475 (2013). Similarly, at the class certification stage, a truth-on-the-market defense raises common class-wide issues. See id. at 482.

Fourth, claims that other factors also contributed in part to the price drops are insufficient to rebut the Basic presumption. “[M]erely suggesting that another factor also contributed to an impact on a security’s price does not establish that the fraudulent conduct complained of did not also impact the price of the security.” Waggoner v. Barclays PLC, 875 F.3d 79, 105 (2d Cir. 2017). And, here, Deal does not opine that fear, uncertainty, and doubt caused all of the declines. (Blatchley Decl., Ex. H, Deal Dep. 84-86, 162-65.) He did not attempt to quantify the amount of the price drop that was caused by other factors.

## 2. Affiliated Ute Presumption

Because the Court concludes that the Basic fraud-on-the-market presumption applies, it need not reach Plaintiffs' alternative argument under Affiliated Ute Citizens of Utah v. United States, 406 U.S. 128, 15354(1972).

## 3. Whether Common Issues of Damages Predominate

The Court concludes that common issues of damages predominate. To establish predominance, Plaintiffs must show that "damages are susceptible of measurement across the entire class." Comcast Corp. v. Behrend, 569 U.S. 27, 35 (2013). Plaintiffs must put forward a damages model that is "consistent with [their] liability case." Id. (citations omitted). "If the model does not even attempt to do that, it cannot possibly establish that damages are susceptible of measurement across the entire class for purposes of Rule 23(b)(3)." Id.

Here, Plaintiffs propose a commonly accepted damages model for securities fraud that is consistent with their theory of liability and calculates damages on a classwide basis. Plaintiffs rely on Hartzmark's out-of-pocket or event study damages model, which "is the standard measurement of damages in Section 10(b) securities cases." City of Miami Gen. Employees' & Sanitation Employees' Ret. Tr. v. RH, Inc., No. 17-CV-00554-YGR, 2018 WL 4931543, at \*3

(N.D. Cal. Oct. 11, 2018) (gathering cases). Hartzmark’s report “satisfies what Comcast demands, that a viable calculation of damages can be made in this case.” Beaver County Employees’ Ret. Fund v. Tile Shop Holdings, Inc., No. 14-786 (ADM/TNL), 2016 WL 4098741, at \*11 (D. Minn. July 28, 2016) (footnote omitted). “It is sufficient for class certification that [Hartzmark] has specified a damages model that can be used to establish damages using a common methodology for all class members, even though certain of the inputs to that model are not yet ascertainable.” Monroe County Employees' Ret. Sys. v. S. Co., 332 F.R.D. 370, 399 (N.D. Ga. 2019).

Hartzmark proposes an event study to create an inflation ribbon that would measure the amount of fraud-related inflation in the price of CenturyLink’s securities on each day of the Class Period; this daily inflation amount would provide the inputs for the out-of-pocket formula. (Hartzmark Report ¶¶ 188-89.) Hartzmark admits that at this stage, he has not “pars[ed] and scal[ed] the abnormal returns” in order to “[c]alculat[e] actual inputs into the” out-of-pocket method, because determining loss causation is not necessary at the class certification stage and “no matter which technique might be chosen at the merits stage of this litigation to construct the inflation ribbon, the techniques



used to estimate the true price (and thus calculate artificial inflation) will be common to all putative class members and will be applied on a class-wide basis.” (*Id.* ¶ 190 (footnote omitted).)

Defendants’ criticisms of the specifics of which techniques will be used to construct the inflation ribbon and actually calculate losses with Hartzmark’s damages model are premature. At the class certification stage, Plaintiffs need merely show, as Hartzmark has done, that “the techniques used to estimate the true price (and thus calculate artificial inflation) will be common to all putative class members and will be applied on a class-wide basis.” (Hartzmark Report ¶ 190 (footnote omitted). See also Blair Decl., Ex. 2, Hartzmark Dep. 147 (“I can say whatever the inputs are, they would be applied classwide, and you would look at the inflation at the time of the purchase and the time of sale. It’s very straightforward.”).) As another district court explained:

[D]efendants’ argument that the plaintiffs’ proposed method fails “to demonstrate how one would measure inflation using any ‘standard tools of valuation’ if it cannot be measured using an event study” is essentially an assertion that plaintiffs’ method will result in incorrect calculations. However, this criticism prematurely addresses the quantification and allocation of damages, which courts consistently find are not appropriately raised at the class certification stage.

RH, Inc., 2018 WL 4931543, at \*4.

Defendants' concerns that Hartzmark has not yet calculated an inflation ribbon or adequately addressed disaggregation are loss causation disputes that are not appropriate for resolution at class certification. See, e.g., Amgen, 568 U.S. at 475.

Calculating the actual inputs into the out-of-pocket method by parsing and scaling the abnormal returns requires an analysis of loss causation. For present purposes, one need only realize that the inflation-ribbon inputs will be common and applied classwide. Thus, the out-of-pocket method does not involve any individualized issues.

SEB Inv. Mgmt. AB v. Symantec Corp., No. C 18-02902 WHA, 2020 WL 2306490, at \*10 (N.D. Cal. May 8, 2020).

Defendants protest that it will be difficult and complex to calculate damages because there are many dates with various alleged misrepresentations, there was other information provided by CenturyLink that could have influenced securities' prices, the alleged fraud increased and decreased as the scheme changed over time, the telecommunications industry underwent changes during this time that influenced the prices of securities, there was general fear based on the Wells Fargo fraud, and the securities' prices changed over time. All of these criticisms go to the accuracy of the damages model and loss causation, but do not prevent class certification because all of these alleged obstacles for

accurate calculation of the damages are the same if there is one plaintiff or one million plaintiffs. Defendants can argue the merits of Plaintiffs' proposed damages model at summary judgment or trial, but whether the Court certifies a class or not has no impact on those arguments. There is nothing about there being more plaintiffs that makes the damages model more or less accurate, because there is no argument here that damages would be individualized. See, e.g., Menaldi v. Och-Ziff Cap. Mgmt. Grp., LLC, 328 F.R.D. 86, 98-99 (S.D.N.Y. 2018) (disaggregation "goes beyond the Rule 23 inquiry" because "[t]he answer for the class will be the same as the answer for the hypothetical lone plaintiff").

#### **G. Superiority (Rule 23(b)(3))**

A class action is the superior method to fairly and efficiently adjudicate this controversy. In general, "securities cases easily satisfy the superiority requirement of Rule 23." In re NYSE Specialists Sec. Litig., 260 F.R.D. 55, 80 (S.D.N.Y. 2009) (citation omitted).

Rule 23(b)(3) requires the Court to consider four factors when determining superiority: "(A) the class members' interests in individually controlling the prosecution or defense of separate actions; (B) the extent and nature of any litigation concerning the controversy already begun by or against class members; (C) the desirability or undesirability of concentrating the litigation of the claims

in the particular forum; and (D) the likely difficulties in managing a class action.” Fed. R. Civ. P. 23(b)(3).

This action meets all four factors. First, Plaintiffs seek to represent a class of thousands of CenturyLink securities purchasers whose individual damages might be too small to make the expense of litigation worthwhile. Second, there is no evidence of any other litigation concerning this controversy already begun by or against Class members. (Blatchley Decl. ¶ 3.) Third, concentrating the litigation in this forum will promote judicial efficiency by resolving the claims of thousands of shareholders in one case. Fourth, there are no manageability concerns.

#### **H. Definition of the Class Period**

The Court denies Defendants’ request to shorten the Class Period by ending it on June 16, 2017, rather than on July 12, 2017. Defendants point to some evidence to support their claim that the thrust of the alleged fraud was revealed in the June 16 Bloomberg article. (See Blair Decl., Ex. 6, Viteri 30(b)(6) Dep. 204 (testifying that June 16, 2017, was the day that “the dam broke” and that the revelations “basically broke the trust of the investment community” in CenturyLink); *id.* 220 (testifying that, on June 16, “the market understands, as a whole, what was occurring at that point in time”).) However, at the class

certification stage, the Court will not shorten the Class Period. First, after the June 16, 2017, disclosure, Defendants denied the allegations and continued the alleged misrepresentations. See In re Snap Inc. Sec. Litig., 334 F.R.D. 209, 225 (C.D. Cal. 2019) (refusing to shorten class period to end on date that lawsuit was revealed because, after that date, it was alleged that defendant “continued to make misrepresentations regarding the lawsuit;” thus, the court determined that “any inquiry as to precisely when the truth was fully disclosed to the market is best reserved for resolution on the merits”).

Second, both Defendants’ and Plaintiffs’ expert found a statistically significant drop in share price after the July 12, 2017 disclosure date. See Monroe County Employees’ Ret. Sys. v. S. Co., 332 F.R.D. 370, 395–96 (N.D. Ga. 2019) (“[N]umerous courts addressing class certification have refused to shorten class periods by dismissing subsequent corrective disclosures where some but not all of the stock price declines following the alleged corrective disclosures were statistically significant. Instead, these courts found that the question of what caused the stock price to decline is an ultimate merits question for which plaintiffs bear the burden at trial, not at class certification.”). “[D]efendants’ arguments present loss causation issues that need not be decided at the class

certification stage as the issues would be common to the putative class.” SEB Inv. Mgmt. AB v. Symantec Corp., No. C 18-02902 WHA, 2020 WL 2306490, at \*9 (N.D. Cal. May 8, 2020). As in SEB Investment Management, Defendants’ own expert admits that “the [July 12] disclosure[] w[as] followed by [a] statistically significant price decline[], indicating that the price had been inflated during the time period prior to [July 12].” Id. (See Blatchley Sur-sur-reply Decl., Ex. X, Deal Dep. 190 (testifying that the corrective disclosures showed they “do seem to have . . . had some impact on the stock price” and that “we can’t rule out these”).)

Third, the July 12 disclosure revealed new information such as the Minnesota Attorney General’s allegations that “maybe 1 out of 5” customers were quoted correctly, a revelation that prompted analysts to downgrade their ratings. (Compl. ¶¶ 163-71; Blatchley Decl., Ex. F, Hartzmark Rebuttal Report ¶¶ 40-43.) Thus, the Minnesota Attorney General’s lawsuit revealed more about the scope of CenturyLink’s billing fraud. Defendant’s expert admitted that investors did not know these facts before the July 12 disclosure. (See Blatchley Sur-sur-reply Decl., Ex. X, Deal Dep. 87-89.)

Overall, the Court concludes that shortening the Class Period would be inappropriate at this time and notes that “arguments regarding the impact or lack of impact of different disclosures on the market are generally reserved for the merits stage, rather than class certification,” In re Snap Inc. Sec. Litig., 334 F.R.D. at 225 (citing Amgen Inc., 568 U.S. at 470, 482), particularly when “when a securities class action defendant has [not] unequivocally disclaimed the prior assertion” id.

Accordingly, based upon the files, records, and proceedings herein, **IT IS HEREBY ORDERED:**

1. Plaintiffs’ Motion for Class Certification, Appointment of Class Representatives and Appointment of Class Counsel [Docket No. 188] is **GRANTED**.
2. The following class (the “Class”) is hereby certified pursuant to Federal Rule of Civil Procedure 23:

All persons and entities that purchased or otherwise acquired publicly traded CenturyLink, Inc. (“CenturyLink”) common stock or 7.60% Senior Notes due September 15, 2039, during the period between March 1, 2013 to July 12, 2017, inclusive (the “Class Period”), and who were damaged thereby (the “Class”). Excluded from the Class are Defendants, CenturyLink’s affiliates and subsidiaries, the officers and directors of CenturyLink and its subsidiaries and affiliates at all relevant times, members of the immediate family of any excluded person, heirs, successors, and assigns of any

excluded person or entity, and any entity in which any excluded person has or had a controlling interest.

3. Lead Plaintiff the State of Oregon by and through the Oregon State Treasurer and the Oregon Public Employee Retirement Board, on behalf of the Oregon Public Employee Retirement Fund (“Oregon”) and Plaintiff Fernando Alberto Vildosola, as trustee for the AUFV Trust U/A/D 02/19/2009, are appointed as Class Representatives.
4. Bernstein Litowitz Berger & Grossmann LLP and Stoll Stoll Berne Lokting & Shlachter P.C. are appointed as Class Counsel.

Dated: September 14, 2020

s/ Michael J. Davis

Michael J. Davis

United States District Court



# Exhibit 1

**UNITED STATES DISTRICT COURT  
DISTRICT OF MINNESOTA**

<b>IN RE: CENTURYLINK SALES PRACTICES AND SECURITIES LITIGATION</b>  This Document Relates to:  Civil Action No. 18-296 (MJD/KMM)	<b>MDL No. 17-2795 (MJD/KMM)</b>
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**CONSOLIDATED SECURITIES CLASS ACTION COMPLAINT**

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Lead Plaintiff the State of Oregon by and through the Oregon State Treasurer and the Oregon Public Employee Retirement Board, on behalf of the Oregon Public Employee Retirement Fund (“Oregon”) and named plaintiff Fernando Alberto Vildosola, as trustee for the AUFV Trust U/A/D 02/19/2009 (“Vildosola,” and collectively with Lead Plaintiff, “Plaintiffs”), individually and on behalf of a class of similarly situated persons and entities, by their undersigned attorneys, allege the following against CenturyLink, Inc. (“CenturyLink” or the “Company”) and the Executive Defendants (defined below), upon personal knowledge as to themselves and their own acts, and upon information and belief as to all other matters.

Plaintiffs’ information and belief as to allegations concerning matters other than themselves and their own acts is based upon the investigation conducted by and through counsel, which included, among other things, the review and analysis of: (i) transcripts, press releases, news articles, and other public statements issued by or concerning CenturyLink and the Executive Defendants; (ii) research reports issued by financial analysts concerning the Company; (iii) reports and other documents filed publicly by CenturyLink with the U.S. Securities and Exchange Commission (“SEC”), the Federal Communications Commission (“FCC”), and other governmental bodies, including state public utility commissions; (iv) publicly filed documents and discovery from the Minnesota Attorney General’s investigation into CenturyLink; (v) CenturyLink’s corporate website; (vi) interviews with former CenturyLink employees; (vii) information and documents obtained through requests made under the Freedom of Information Act (“FOIA”) and similar state open records laws, including from the FCC, numerous state

Attorneys General and other governmental bodies; and (viii) other publicly available information. Plaintiffs believe that substantial additional evidentiary support will exist for the allegations set forth herein after a reasonable opportunity for discovery.

Plaintiffs bring this federal securities class action on behalf of themselves and a class consisting of all persons and entities who purchased, or otherwise acquired, the securities of the Company from March 1, 2013 to July 12, 2017, inclusive (the “Class Period”), subject to certain exclusions addressed below (the “Class”). Defendants in this action are: CenturyLink; Glen F. Post, III (“Post”), CenturyLink’s former CEO; R. Stewart Ewing, Jr. (“Ewing”), CenturyLink’s former CFO; David D. Cole (“Cole”), CenturyLink’s former Executive Vice President and Controller, Karen Puckett (“Puckett”), CenturyLink’s former Global Head of Sales; Dean J. Douglas (“Douglas”), former President, Sales and Marketing; and G. Clay Bailey (“Bailey”), former Senior Vice President and Treasurer. Plaintiffs’ and the Class’s claims arise under Sections 10(b) and 20(a) of the Securities Exchange Act of 1934 (“Exchange Act”) and Rule 10b-5 promulgated thereunder.

## **I. PRELIMINARY STATEMENT**

1. This case arises out of CenturyLink’s years-long practice of routinely and systematically misquoting prices and improperly billing customers for services they did not request. This illegal practice, termed “cramming,” was so endemic and institutionalized at CenturyLink that, according to an internal CenturyLink audit, the Company potentially overbilled 3.5 million customers—a number representing over half of CenturyLink’s 5.9 million broadband subscribers and one-third of its 12 million wireline subscribers.



2. The Company's systemic overbilling was condoned and encouraged by the Company's senior leadership, which depended upon these corrupt practices to meet the financial projections Defendants provided to Wall Street. Naturally, the fact that the Company overbilled half of its customers had a material financial impact on the Company's reported financial results. But CenturyLink never once disclosed that the Company's reported revenues could be called into question, let alone suggest any hint of wrongdoing.

3. To the contrary, during the Class Period, Defendants told investors that the Company's sales practices were beyond reproach, and publicly committed that CenturyLink would never "place or record an order for our products and services for a customer without that customer's authorization." Instead, Defendants falsely attributed CenturyLink's substantial revenue and subscriber growth in its consumer and small business segments to the Company's focus on "customer needs" and its "customer first" sales approach, competitive "bundling" marketing strategy, and strict adherence to the Company's Unifying Principles: "fairness, honesty and integrity." These and similar representations were critical to investors, and gave them confidence that the Company would weather the declines in the Company's long distance wireline services, effectively compete with cable operators to sell broadband high speed internet and television services, and continue to generate dependable and sustainable cash flows.

4. Unfortunately for investors, these representations were entirely at odds with reality. Contrary to Defendants' representations, CenturyLink:

- routinely added services to customers' accounts without authorization, which would result in customers being charged for services they did not need, request or approve;

- routinely and repeatedly lied to customers about the prices they would be charged, including by misrepresenting the terms and conditions required to obtain promotional discounts, the duration of discounted prices and other contract terms, and penalties for cancellation;
- systematically misquoted the prices of customer contracts by failing to disclose that “bundled” and other multiple service packages included fees for optional services that the customer did not need or authorize—a sales pitch developed by CenturyLink management, taught to sales trainees, and promoted at monthly sales meetings; and
- concealed other highly material contract terms and misled customers concerning significant limitations on their service including the suitability or availability of particular services (such as the available speed of broadband), the existence of “early termination fees,” and other material terms.

5. These deceptive practices were documented in the Company’s computer systems, reviewed by the Company’s quality assurance analysts, recorded in scores of employee termination and disciplinary investigations and proceedings, and detailed in internal audits and reports reviewed by senior management. Indeed, CenturyLink potentially overbilled up to half of its subscribers. Such widespread cramming did not escape the attention of the Company’s senior management.

6. In fact, the Company’s senior leadership directly and purposefully encouraged this behavior by imposing unachievable sales quotas on sales employees. In the words of former CenturyLink employees, the Company’s sales quotas – which were dictated by the Executive Defendants and based on the revenue projections they approved – were “insane,” so “ridiculously high you had to cheat to get your numbers” and “impossible to meet unless you were engaged in shady practices.” The Company’s senior management closely monitored and enforced strict compliance with these quotas, and

terminated sales employees who did not meet them. That punishment was meted out even though, during a significant portion of the Class Period, it meant that over half of all sales employees were disciplined for failing to meet CenturyLink’s quotas.

7. As explained by numerous former employees, however, at CenturyLink, the “numbers are the numbers,” and the Company refused to adjust quotas despite the fact that they could not be met without engaging in fraud. At the same time, employees who exceeded sales goals were rewarded with cash bonuses and recognized as honorees in the Company’s “Circle of Excellence” program—even if those sales were achieved through deceptive means. In fact, as reported by former CenturyLink employees, “Circle of Excellence” honorees were often the very same employees who were engaged in deceptive practices and cited for illegal cramming.

8. The cramming culture at CenturyLink was such an ingrained and endemic part of the Company’s business that, during the Class Period, the Executive Defendants internally acknowledged the problem and secretly took significant steps to address it. For example, in April 2014, Defendant Bailey – who worked “directly” for Defendant Post in dealing with the Company’s billing systems and call centers – acknowledged that cramming was occurring on a significant scale, and agreed that “[w]e’ve got to do something about our call centers.” Shortly thereafter, Defendant Post sent out an internal Company email announcing that Defendant Bailey would be responsible for business ethics and how the Company deals with customers.

9. Next, just months later, CenturyLink implemented a significant change to the Company’s sales employee performance assessment model specifically in order to address

the Company's unethical sales practices. Although the new method was an initial success—with customer complaints and terminations for unethical behavior declining significantly—it was soon followed by a decline in sales. Unwilling to tolerate any drop in revenues, CenturyLink's senior management reverted back to strict quota-enforcement almost immediately. At the same time, the Executive Defendants continued to receive and review monthly reports detailing the thousands of customer and regulator "cramming" and billing complaints which confirmed the scope and seriousness of the fraud.

10. Instead of disclosing the truth—that CenturyLink's cramming practices were a material driver of the Company's revenues, and that efforts to address them had led to a sharp decline in sales—Defendants concocted a false story to explain the Company's fluctuating financial results. In fact, at the same time, the SEC directly questioned the Company about the adequacy of its disclosures concerning the performance of the consumer segment and the Company flatly denied any material information was omitted—despite the fact that the Company had turned its entire sales operation upside down, and back again, because its revenues were so drastically impacted by illegal billing.

11. Unwilling to report a continued slowdown in sales, CenturyLink returned to form, and the Company's billing misconduct again continued to drive customer complaints and began to attract the attention of the news media and regulators. But even as complaints and state regulator and news media investigations mounted, the Company refused fix its broken sales culture, failed to disclose the widespread fraud and related investigations, and affirmatively denied allegations of improper sales practices.

12. For example, in April 2016, CenturyLink quietly settled an investigation into its billing practices by the Arizona Attorney General, agreeing to a nominal \$150,000 payment while “expressly” denying each and every one of the regulator’s allegations. And although CenturyLink agreed to adopt changes to prevent further cramming, the Company swiftly disregarded the measures it promised the Arizona Attorney General it would follow.

13. In May 2016, just a month later, the Minnesota Attorney General served CenturyLink with a civil investigative demand following scores of complaints by Minnesota customers. While Defendant Post would later attempt to take personal credit for “cooperating with the AG’s office since the inquiry began,” Minnesota Attorney General Lori Swanson made clear that CenturyLink did everything in its power to quash the investigation and keep CenturyLink’s billing practices a secret. For example, when responding to General Swanson’s discovery requests, CenturyLink falsely denied documents existed—but when the Attorney General subpoenaed CenturyLink’s vendors, they “promptly” produced the documents CenturyLink claimed did not exist. CenturyLink’s response to the Minnesota Attorney General was consistent with how it handled the Arizona Attorney General and other state regulator investigations into the Company—the Company tried to get by with only paying a nominal fine and agreeing to cosmetic changes, but never actually intended to reform its practices. As explained by one former employee, CenturyLink’s senior management would rather “pay the fines” than “kowtow” to a state Attorney General.

14. Several months later, as a similar scandal involving the unauthorized opening of customer accounts at Wells Fargo began to make headlines, a CenturyLink

whistleblower, Heidi Heiser, brought her concerns over the cramming she witnessed directly to the attention of CenturyLink's CEO, Defendant Post. Specifically, in an online town hall meeting in October 2016, during which Company employees had the opportunity to post questions to an online message board for review by Defendant Post, Heiser asked the CEO "why customers were being given multiple accounts and being billed for things they did not ask for" – again alerting CenturyLink's senior-most executives to the practices they had previously attempted to address. Consistent with the manner in which the Company treated other employees who challenged CenturyLink's practices, the whistleblower's post was promptly removed, and she was terminated just two days later.

15. As CenturyLink sought to scuttle the Minnesota Attorney General's investigation and fired employees who challenged the Company's sales culture, the Executive Defendants doubled down on their false portrayal of CenturyLink's "customer first" approach. For example, in a May 2016 investor conference call, the Executive Defendants sought to distinguish the Company from CenturyLink's competitors, representing that – unlike other providers – CenturyLink did not "add[] a lot of fees" to customers' bills. At the same time, the Company continued to tout its "honest and personal service" and pointed investors to its Code of Conduct, in which CenturyLink promised it would not "misstate facts or mislead consumers through Company advertisements or promotions," "engage in unethical or deceptive sales practices," or "place or record an order for our products and services for a customer without that customer's authorization."

16. The truth concerning the Company's fraudulent practices began to be revealed on June 16, 2017, when *Bloomberg* published a story revealing that a CenturyLink

whistleblower, Heiser, was fired after raising her concerns about the Company's fraudulent business practices with Defendant Post. That article, titled "CenturyLink Is Accused of Running a Wells Fargo-Like Scheme," addressed Heiser's account of CenturyLink's practice of charging customers for services they did not request, the striking parallels to the Wells Fargo scandal, and the fact that these practices had led to "many millions" of dollars in improperly recorded revenues. As a result of these revelations, the Company's stock declined significantly on extraordinarily heavy volume.

17. The next trading day, on June 19, 2017, CenturyLink's securities continued to decline after additional reports of consumer class actions filed in the following days alleging systemic billing misconduct in numerous states across the country.

18. Then, on July 12, 2017, the Minnesota Attorney General announced that it had filed a lawsuit against CenturyLink alleging violations of state consumer protection laws after a year-long investigation. As detailed in news reports, the Minnesota Attorney General's complaint, which was posted on its website, provided extensive detail as to how the Company defrauded Minnesota consumers by refusing to honor the prices they were quoted. Among other things, the complaint cited internal Company employee emails and call recordings detailing that "maybe 1 out of 5 [customers] are quoted correctly or close enough." The details provided in the Minnesota Attorney General's complaint also further revealed the financial impact of the Company's fraudulent practices—documenting scores of instances where customers were charged hundreds of dollars more than they should have been.

19. Analysts reacted sharply to the news, and downgraded their ratings on the Company's stock. CenturyLink's stock declined immediately in a statistically significant manner on extraordinarily high volume, causing substantial investor losses.

20. CenturyLink's illegal billing practices are now the subject of investigations by state Attorneys General around the country, the Company has been forced to adopt changes to address the cramming practices that undergirded the Company's reported growth, and CenturyLink's revenues have stagnated as a result. Indeed, the Company's stock price is currently trading at approximately \$18.00 per share, or less than half of its Class Period high.

21. Through this action, Plaintiffs and other CenturyLink investors seek to hold the Company and the Executive Defendants accountable for this misconduct, and recover the significant losses caused by their fraud.

## **II. JURISDICTION AND VENUE**

22. This Complaint asserts claims under Sections 10(b) and 20(a) of the Exchange Act, § 78j(b) and 78t(a), and the rules and regulations promulgated thereunder, including SEC Rule 10b-5, 17 C.F.R. § 240.10b-5 ("Rule 10b-5").

23. This Court has jurisdiction over the subject matter of this action under Section 27 of the Exchange Act, 15 U.S.C. § 78aa, and 28 U.S.C. § 1331, because this is a civil action arising under the laws of the United States.

24. Venue is proper in this District under Section 17 of the Exchange Act, 15 U.S.C. § 78aa, and 28 U.S.C. § 1391(b) and (c) because the Company has significant operations in this District and many of the acts and transactions that constitute violations



of law complained of herein, including the dissemination of the materially false and misleading statements set forth herein, occurred in this District.

25. In connection with the acts alleged in this complaint, Defendants, directly or indirectly, used the means and instrumentalities of interstate commerce, including, but not limited to, the mails, interstate telephone communications, and the facilities of the national securities markets.

### **III. PARTIES**

#### **A. Plaintiffs**

26. Lead Plaintiff State of Oregon by and through the Oregon State Treasurer and the Oregon Public Employee Retirement Board, on behalf of the Oregon Public Employee Retirement Fund (“Oregon”) operates and oversees public funds for the benefit of retired public employees. The Oregon Public Employee Retirement Fund is a state pension fund for retired public employees overseeing \$77 billion in assets under management as of April 30, 2018. As reflected in its certification filed herewith, Oregon purchased CenturyLink securities during the Class Period and suffered damages as a result of the violations of the federal securities laws alleged herein.

27. Named Plaintiff Vildosola purchased CenturyLink securities during the Class Period. Fernando Alberto Vildosola resides in the State of California and is trustee for AUFV Trust U/A/D 02/19/2009. As reflected on the certification filed herewith, AUFV Trust U/A/D 02/19/2009 purchased CenturyLink’s 7.60% Senior Notes due September 15, 2039 (the “7.60% Senior Notes”) during the Class Period and suffered damages as a result of the violations of the federal securities laws alleged herein.

**B. Defendants**

28. Defendant CenturyLink is a Louisiana corporation headquartered at 100 CenturyLink Drive, Monroe, Louisiana 71203. CenturyLink's common stock trades on the New York Stock Exchange under the symbol "CTL."

29. Defendant Post was at all relevant times the CEO, President, and a director of CenturyLink. During the Class Period, CenturyLink announced that Defendant Post would be succeeded in his role as CEO of CenturyLink on January 1, 2019, or about 15 months after the Company's then-pending merger with Level 3 Communications, Inc. ("Level 3") was expected to close. Then, on March 9, 2018, after the end of the Class Period, and just several weeks after CenturyLink disclosed the results of its internal investigation into the misconduct at issue in this case, the Company announced that Defendant Post would in fact be leaving far sooner—on May 23, 2018, following the Company's 2018 Annual Shareholders' Meeting.

30. Defendant Ewing was, at all relevant times, the CFO and Executive Vice President of CenturyLink. Ewing resigned his post shortly after CenturyLink closed its acquisition of Level 3 on November 1, 2017.

31. Defendant Cole was at all relevant times Executive Vice President and Controller of CenturyLink, and served as the Company's principal accounting officer during the Class Period. On March 27, 2018, Cole informed the Company of his decision to step down from the Company effective April 8, 2018.

32. Defendant Puckett spent 15 years at CenturyLink until the Company unexpectedly announced her departure on June 2, 2015. From 2009 through October 2014,

Puckett served as CenturyLink's Executive Vice President and COO. From November 2014 until she left the Company in August 2015, she served as CenturyLink's President of Global Markets. During the Class Period, Puckett was the highest ranking executive with direct oversight of the consumer segment sales division. In the June 2, 2015 announcement describing her departure, which came just four months after she was promoted to global head of sales, Post said that "Karen and I have mutually arrived at a conclusion that, after 15 years of hard work and extensive contributions, she will retire from the company." Puckett forfeited over \$2.2 million worth of CenturyLink stock upon termination of her employment.

33. Defendant Douglas took over Puckett's role. He began his employment at CenturyLink as President, Sales and Marketing in February 2016, and was later named President, Enterprise Markets. On April 28, 2017 CenturyLink disclosed that Douglas would be a member of the "senior leadership" team reporting to Post after the Level 3 merger closed and, on June 1, 2017, confirmed certain executive compensation that Douglas would receive in connection with that role in a Form 8-K filed with the SEC. However, less than two months later, following the disclosures of the Company's widespread cramming practices alleged herein, on June 22, 2017, CenturyLink disclosed that Douglas had "decided to leave the company at the close of the Level 3 transaction." In doing so, Douglas forfeited over \$2 million in compensation.

34. Defendant Bailey held numerous positions during his 25-year career at CenturyLink. During the Class Period, Bailey served as the Company's Senior Vice President and Treasurer and, as such, had significant involvement in the Company's

financial affairs and, under the Company's bylaws, had general custody of all of the funds and securities of the Company and authority to sign all bills of exchange or promissory notes of the Company. In 2014, Defendant Bailey served as CenturyLink's Senior Vice President of Operations with oversight over "all [CenturyLink's] region operations." In 2015, Defendant Post asked Bailey to serve as "Senior Vice President of Operations Transformation." As described by Defendant Post, in that role, Defendant Bailey oversaw a team "devoted to...bringing really a better customer experience at every touch point for our customers." Defendant Ewing explained that, in this position, "Clay basically works directly for [Defendant Post], and he's in charge of really taking a look at all of our processes to see how we can streamline our processes to enable us to be easier to do business with from a customer perspective." During the Class Period, Defendant Bailey served as a spokesperson for the Company, including in investor conference calls and presentations. Previously, Defendant Baily served as the lead of the Company's Regulatory and Legislative teams at both the state and federal levels, and served as a spokesperson for the Company in its interactions with regulators.

35. The Defendants referenced above in ¶¶29-34 are collectively referred to herein as the "Executive Defendants." The Executive Defendants, because of their high-ranking positions and direct involvement in the everyday business of CenturyLink and its subsidiaries, directly participated in the management of CenturyLink's operations, including its public reporting functions, had the ability to, and did control, CenturyLink's conduct, and were privy to confidential information concerning CenturyLink and its business, operations and financial statements, as alleged herein.

36. CenturyLink and the Executive Defendants together are sometimes collectively referred to herein as the “Defendants.”

#### **IV. FACTUAL BACKGROUND AND SUBSTANTIVE ALLEGATIONS OF FRAUD**

37. CenturyLink is the third largest telecommunications company in the United States, and provides a wide variety of telecommunication, internet and similar services to approximately 12 million customers. The Company’s main offerings include local and long-distance telephone services, broadband internet access, and video services. Although CenturyLink changed its reporting segments at certain points during the Class period, the Company’s consumer segment was, at all times, a major driver of the Company’s financial success. The consumer segment accounted for a third or more of the Company’s revenues during the Class Period, or up to \$6 billion or more annually, and was a central focus for CenturyLink’s investors.

38. Although it was not separately reported, CenturyLink’s Small and Medium Business (“SMB”) sales also served as a significant source of revenue for the Company. Former Employee No. 1 (“FE-1”), who worked at CenturyLink for approximately 18 years, including as a Manager of Customer Care and Sales in the Southeastern United States until February 2018, estimated that the SMB business was approximately 20% of the size of the consumer segment, and employed the same, call-center based sales apparatus as the consumer segment.

**A. CenturyLink Touts Revenue Growth Through Acquisitions And Its Purportedly Superior Customer Service And Marketing Practices**

39. Throughout the Class Period, CenturyLink touted its purportedly superior “customer-first” approach as a key distinguishing feature and a driver of the Company’s success. Even before the Class Period, the Company told investors that this approach would enable the Company to succeed where its competitors had fallen short.

40. Through a series of acquisitions, including the Company’s \$11.6 billion acquisition of Embarq in July 2009, its \$24 billion acquisition of Qwest in April 2011, and its \$2.5 billion acquisition of Savvis in July 2011, CenturyLink had grown to become the third largest telecommunications provider in the United States by the beginning of the Class Period. During this period of extraordinary growth, the Company repeatedly told investors that its success would be based on providing a superior “customer experience” relative to its competitors. Specifically, the Company told investors that CenturyLink would grow revenues and add subscribers through its superior “marketing strategy” and “customer care system,” all while maintaining strict adherence to the Company’s Unifying Principles, including “fairness, honesty and integrity.” According to CenturyLink, these were the key “differentiators” that were the basis for the Company’s success. As CenturyLink claimed, “our employees keep our customers at the center of everything we do.”

41. CenturyLink also told investors that its “customer first” business model would enable the Company to grow revenues in the markets where Embarq and Qwest had previously competed, but had fallen short. For example, Defendant Ewing, CenturyLink’s CFO, told investors that CenturyLink would be able to leverage its superior “customer

service and marketing efficiencies” to grow revenues in markets previously served by Embarq by changing “what they’ve been doing from a marketing standpoint and [using] the approach that we’re using.” Similarly, Defendant Post, CenturyLink’s CEO, explained that the Company would “drive revenues and to create synergies in the Embarq areas” by deploying CenturyLink’s IT and “billing systems, [which] we think [will] create a better customer experience and reduce costs significantly from a customer service standpoint.” Immediately after the Embarq acquisition closed in July 2009, CenturyLink began to highlight the revenues the Company was generating from its superior marketing capabilities. For example, during the Company’s November 5, 2009 third-quarter conference call, Defendant Post said this strategy was “going very well” and “already making a difference” due to the change to “local market focus.” As Post explained:

We have implemented our aggressive Broadband strategy and Embarq market in the third quarter. And among a number of things this effort included consumer promotional pricing for high-speed internet and the targeting of non-customers with our Pure Broadband products. It has proven very successful and obviously contributed to our Broadband customer growth during the quarter.

42. CenturyLink similarly told investors that adopting its sales and marketing approach in areas formerly served by Qwest enabled the Company to take back market share Qwest had previously ceded to competitors. During a presentation at the UBS Global Media and Communications Conference on December 8, 2010, Defendant Ewing explained that CenturyLink would operate its newly-acquired Qwest division “the same way we operate legacy CenturyLink today.” As with Embarq, Defendants touted the Company’s success in applying the CenturyLink approach to Qwest markets. For example,

during a September 13, 2012 investor call, Defendant CFO Ewing claimed “[w]e’re seeing results in the Qwest markets from just the local model that we’ve implemented.” Ewing claimed these results were due to the CenturyLink model, where managers are “responsible for serving our customers out there and really gathering the information that helps define the way we compete against the cable company in that market.”

**1. CenturyLink Represented That It Met and Exceeded Regulators’ Customer Service Standards And That Risks Of Non-Compliance With Those Standards Were Merely Hypothetical**

43. CenturyLink carefully crafted a public image as an honest steward of its telecommunications infrastructure by repeatedly claiming that it met and exceeded the customer service standards and consumer protection laws governing its business. During the Class Period, CenturyLink was subject to significant regulation by the Federal Communications Commission (the “FCC”), which regulates interstate communications, state utility commissions, which regulate intrastate communications, and other regulators that enforce rules to protect consumers and promote competition.

44. One critical set of regulations designed to protect consumers from unscrupulous sales and billing conduct targets a practice known as “cramming.” “Cramming” refers not only to the situation in which a customer is charged for a service he or she did not authorize or request, but also encompasses other improper practices in which customers are not properly informed of the terms or conditions of services. For example, the FCC defines “cramming” as “placing unauthorized, misleading or deceptive charges on a consumer’s telephone bill” or failing to “clearly or accurately describe all of



the relevant charges when marketing a service.”<sup>1</sup> Many states and municipalities have enacted legislation specifically outlawing cramming that describe the practice similarly.<sup>2</sup>

45. The illegal practice of cramming became a prominent concern of the public prior to the Class Period. In May 2010, Senator John D. Rockefeller IV, the then-Chair of the Senate Committee on Commerce, Science, and Transportation (the “Senate Committee”), opened an investigation to examine the extent of third-party cramming. That investigation culminated in a July 12, 2011 Senate Committee report that found, among other things, that AT&T, Verizon, and Qwest (which CenturyLink acquired in April 2011) had reaped more than \$650 million from third-party billing.<sup>3</sup>

46. During the Senate Committee’s investigation, CenturyLink sought to distance itself from third-party cramming and to assure regulators that its billing practices

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<sup>1</sup> Another illegal practice, “slamming,” occurs when a service provider switches a consumer’s traditional wireline telephone company for local, local toll, or long distance service without permission. Given the similarity between the terms, even professionals in the telecommunications industry refer to “slamming” when they instead mean “cramming,” and vice versa. As used herein, both “cramming” and “slamming” refer to the practice of “cramming” unless otherwise noted.

<sup>2</sup> For example, Wisconsin prohibits a service provider from initiating “any price increase or other subscription change without giving the consumer prior notice,” and specifically targets notice concerning the “duration of the promotional offer” and the “terms that would apply after the promotional offer expired.” Similarly, California Public Utilities Commission General Order 168 Part 4 provides that “[c]ramming occurs when an unauthorized charge is placed on a Subscriber’s telephone bill,” and defines an “unauthorized charge” as “any charge placed upon a Subscriber’s telephone bill for a service or goods that the Subscriber did not agree to purchase, including any charges that resulted from false, misleading, or deceptive representation.”

<sup>3</sup> U.S. Senate Committee on Commerce, Science, and Transportation, Staff Report on Unauthorized Third-Party Charges on Telephone Bills (July 12, 2011).

were appropriate. For example, in an October 24, 2011 submission to the FCC addressing cramming, CenturyLink highlighted the purported integrity and rigor of the Company's processes relating to third-party billing. Among other things, the Company told the FCC that it "monitors customer inquiries and complaints" about third-party billing and that the Company's "customer inquiry and complaint process focuses on customer satisfaction." According to the Company, "CenturyLink has a customer-friendly dispute resolution process to address complaints about alleged cramming."

47. CenturyLink even sought to present itself as an industry leader in combatting cramming. In a March 21, 2012 letter to CenturyLink, U.S. Senator Amy Klobuchar (D-Minn.) asked that CenturyLink voluntarily agree to limit third-party billing, noting that doing so would represent a "significant step to cracking down on cramming." Senator Klobuchar told CenturyLink that "consumers shouldn't have to open their phone bills every month to find an endless array of ghost charges they never authorized" and urged him to "step up to the plate" and remove third-party billing for services outside CenturyLink's network. Recognizing the political and public relations benefits of taking that step – and that third-party (as opposed to direct service) billing was not a significant source of revenues to the Company – CenturyLink agreed to the change a week later.

48. Thereafter, CenturyLink repeatedly highlighted its "voluntary" move to remove third-party billing in an attempt to distinguish itself from competitors, present the false impression to investors and regulators that the Company engaged in ethical and transparent billing practices, and to avoid further governmental oversight of its actual billing practices. For example, in a June 25, 2012 submission to the FCC, CenturyLink

argued that the proposed rules were unnecessary because CenturyLink had already agreed to limit third-party billing. In doing so, CenturyLink highlighted its purported commitment to its customers, explaining that “CenturyLink values our customers and seeks to treat them fairly and equitably in our delivery of products and services, including billing.” Similarly, in a November 18, 2013 response to the FCC for further comment on the proposed rules, CenturyLink portrayed itself as an industry leader in combatting cramming practices:

CenturyLink values our customers and seeks to treat them fairly and equitably in our delivery of products and services, including billing. And we share the Commission’s goals of ensuring consumers are not subjected to unauthorized third-party charges. In that vein, CenturyLink determined mid-summer 2012 to reduce the scope of our third-party billing services, essentially foregoing most third-party enhanced-services billing....

Our decision to reduce third-party billing activities was shared by other major U.S. wireline providers. And those billing reductions became operative coincident with additional regulations associated with the Commission’s 2012 Cramming Order. The combination of these activities, we believe, has produced an environment associated with wireline carrier third-party billing that does not warrant additional government intervention.

49. CenturyLink also specifically agreed to abide by consumer protection standards throughout the country in representations to the FCC and to state and local authorities. Under the 1992 Cable Act, the FCC promulgated consumer protection standards in connection with cable television service, and empowered local authorities to enforce the FCC’s standards and to promulgate their own, stricter standards. The FCC’s standards – the very baseline CenturyLink was required to meet – required CenturyLink to, among other things, give subscribers 30 days’ advanced notice of any changes in rates, promptly issue refunds and credits for overcharges, and promptly answer customer calls. As CenturyLink expanded its provision of cable services, the Company entered into

numerous franchise agreements with local authorities in which it agreed to abide by the FCC standards, or even stricter rules.

50. CenturyLink was also required to comply with consumer protection laws in the states where the Company conducted business, as well as similar rules enforced by the Federal Trade Commission (“FTC”), the Consumer Financial Protection Bureau and state Attorneys General. In fact, every year during the Class Period, Defendant Cole personally certified under penalty of perjury that he was “familiar with the Company’s day-to-day operations” and the applicable “consumer protection rules” governing CenturyLink’s business, and affirmed that the Company was “complying with applicable service quality standards and consumer protection rules,” including those prohibiting the “unauthorized switching to another telecommunications provider and unauthorized inclusion, or addition of services, commonly known as slamming and cramming,” in 35 states and over 100 jurisdictions.

51. Government enforcement of these consumer protection laws took on particular significance during the Class Period. Beginning in the fall of 2014, the FTC and attorneys general from all 50 states pursued claims and obtained multimillion-dollar settlements from AT&T and T-Mobile for illegal third-party cramming. In the AT&T case, which settled for \$105 million, the government alleged that customers had requested refunds of more than 40% of the charges placed by some third parties – which should have rung “alarms inside AT&T” – but AT&T refused to refund the amounts, capping any refunds at only two months’ worth of charges no matter how long the customer had been

improperly charged. These highly publicized enforcement actions alerted the Executive Defendants to the significant consequences the Company's illegal cramming would invite.

52. For this reason, CenturyLink itself repeatedly told investors that compliance with these laws and regulations was critical to the Company's success, and that the consequences of noncompliance would be highly material. In SEC filings prior to and throughout the Class Period, CenturyLink represented that it faced hypothetical risks in connection with the high level of regulatory oversight it experienced. For example, in the Company's 2013 Annual Report filed with the SEC on February 27, 2014, CenturyLink warned that the Company was subject to "significant" regulations by the FCC and state utility commissions, that the "agencies responsible for the enforcement of these laws, rules and regulations may initiate inquiries or actions based on customer complaints or on their own initiative," and that such actions could "have a material adverse effect on our operations." In other words, the Company told investors that noncompliance with consumer protection laws was a mere "risk"—not that this risk was likely materialize. As Defendant Bailey explained in testimony before the Public Service Commission of Utah before the Class Period, the risk warnings contained in CenturyLink's SEC filings were "not intended to suggest that the risks are likely outcomes."

53. And this is exactly how investors understood CenturyLink's purported risk warnings, particularly given that CenturyLink at the same time assured investors that the Company strictly complied with the regulations governing its business. Among other things, CenturyLink published, and disseminated to investors on its website, a Code of Conduct. In that document, CenturyLink acknowledged the importance of complying with

laws and regulations governing its customer interactions, and claimed to adhere to certain proscriptions on unethical conduct. Pursuant to the Code of Conduct, CenturyLink assured investors that the Company would be “truthful and demonstrate integrity in all our dealings,” “[n]ever encourage or direct employees to achieve business results at the expense of ethical conduct or compliance with the Code or the law,” and “truthfully market, promote, advertise and sell our products” – a requirement that was part of the Company’s “commitment to act honestly in all business affairs.” Specifically, with regard to customer interactions, the Code assured investors that “[a]ll descriptions of our products, services, and prices must be truthful and accurate,” and the Company would not “misstate facts or mislead consumers through Company advertisements or promotions.” Most significantly, the Code stated that the Company would not “engage in unethical or deceptive sales practices,” including “plac[ing] or record[ing] an order for our products and services for a customer without that customer’s authorization.”

54. CenturyLink touted its Code of Conduct in SEC filings throughout the Class Period. For example, CenturyLink’s 2014 Form 10-K stated that “[w]e have adopted written codes of conduct that serve as the code of ethics applicable to our directors, officers and employees,” that the Code of Conduct was “available in the ‘Corporate Governance’ section of our website” and that, to the extent “we make any changes (other than by a technical, administrative or non-substantive amendment) to, or provide any waivers from, the provisions of our code of conduct applicable to our directors or executive officers, we intend to disclose these events on our website or in a report on Form 8-K filed with the

SEC.” Based on these statements, the Company assured investors that they could take comfort in the Company’s sales practices and the accuracy of its public disclosures.

**2. CenturyLink Told Investors that Its Results Were Driven By Its “Honest and Personal Service,” Superior “Customer Experience” and Strategic “Bundling” Strategy**

55. Not only did the Company tout its purported compliance with the laws governing CenturyLink’s sales practices, CenturyLink told investors that those sales and marketing practices would help it combat structural challenges facing the Company’s business. CenturyLink’s core business was historically focused on providing local and long distance telephone service – which the Company called “legacy services.” But by the beginning of the Class Period, those services were in severe structural decline because, as the Company explained in its 2014 Form 10-K, “an increasing number of consumers are willing to substitute cable, wireless and electronic communications for traditional voice telecommunications services.” This well-recognized phenomenon, often referred to in the industry as customers’ “cutting the cord,” presented a significant threat.

56. Indeed, immediately before the Class Period, investors were alerted to just how significant a threat this trend posed to the Company’s long-term financial health. Specifically, just before the beginning of the Class Period, CenturyLink announced a massive 25% dividend cut—a move that Defendant Post said was prompted by rating agencies’ concerns about the Company’s ability to service its debt. The market reacted severely to this development, which sparked concerns over the Company’s financial health and led numerous analysts to downgrade the Company’s stock, which fell 22.6% on the announcement.

57. To counter the structural decline in wireline services and reassure investors about the Company's ability to continue generating the cash flows required to fund its dividend, CenturyLink began to focus on selling what it termed "strategic services," which included consumer broadband, cable television, and similar newer technologies. As Defendant CEO Post explained, the Company's "strategic priorities" included increasing sales of "consumer broadband and video" as a key to driving "long-term profitable growth and value for our shareholders." The Company's ability to successfully grow these business lines and return to "revenue stability" was of critical importance to investors – indeed, it was a focus of every conference call during the Class Period.

58. In fact, throughout the Class Period, Defendants repeatedly highlighted the marketing and sales strategies the Company purportedly used to grow new subscribers, prevent customers from leaving, and increase sales—and falsely credited these practices as responsible for CenturyLink's reported revenues. Specifically, the Company told investors that one of its key marketing initiatives involved selling these services as "bundled" packages, in which consumers bought more than one of voice, data, and video products as a single package. Defendants regularly explained that customers who purchased bundles were less likely to "churn," or leave the Company for a competitor, than were customers who only purchased a single product. This marketing approach was highlighted in the Company's SEC filings throughout the Class Period, in which CenturyLink explained that "[o]ur strategy is to enhance our communications services by offering a comprehensive bundle of services...to further enhance customer loyalty."



59. The Executive Defendants also touted the Company's "bundling" marketing strategy on investor conference calls. For example, on an August 3, 2016 conference call, Defendant Douglas explained that the Company's ongoing "shift" to targeting "bundled customers" drove "better ARPU," or "average revenue per user," as well as a "longer lifetime revenue base for that customer." According to Douglas, the Company was seeing "churn level for our pure customers, or standalone high-speed customers" that was "double that of what we're seeing in those bundled customers," explaining this signified a "very, very significant churn rate in those [pure, non-bundled] customers." Defendants touted the Company's ability to cross-sell products as a reason for optimism about CenturyLink's revenue prospects throughout the Class Period.

60. The Company also told investors that one of the keys to its sales strategy was the use of the Company's call centers. During the Class Period, the Company operated 18 call centers throughout the country, each of which was managed by a Call Center Director. Call Center Directors reported to Linda Olsen, CenturyLink's Vice President of Consumer Contact Centers, who in turn reported to Defendant CEO Post. In numerous SEC filings before and throughout the Class Period, CenturyLink explained that "[w]e...rely on our call center personnel to promote sales of services that meet the needs of our customers" and that "[o]ur approach to our...residential customers emphasizes customer-oriented sales, marketing and service."

61. The Company's representations were critical to investors' evaluation of CenturyLink stock—particularly in light of the structural challenges facing the Company's business. For example, at the beginning of the Class Period, analysts at Morningstar Inc.

noted that, while CenturyLink reported “nicely improved customer metrics in the consumer and small business segment recently, we expect competition and declining demand will continue to steadily erode revenue and margins in this business.” Accordingly, the analysts were hopeful that CenturyLink would regain ground in those expanded territories through the “strategies [CenturyLink] employed in the past, such as empowering local management and using more direct marketing, to improve performance at both Embarq and Qwest.”

**B. CenturyLink’s Revenues Were Secretly Driven By An Institutionalized Company-Wide Sales Cramming Apparatus**

62. Defendants’ representations touting the Company’s “customer first” focus, superior customer service approach, and legal compliance were false. In reality, fraudulent sales practices were at the very core of the Company’s business model.

63. During the Class Period, CenturyLink implemented a boiler-room sales apparatus in which intense pressure was exerted on sales personnel – including employees in so-called “customer service” positions – to bill for CenturyLink products and services without regard to whether customers wanted or requested them. This pressure took the form of impossibly high sales quotas, which employees were required to meet under threat of termination, as well as rewards and incentives for generating sales regardless of how they were obtained. Under this constant pressure, customer service employees turned to deceptive practices to hit their numbers, including cramming, misquoting prices, and falsification of contracts. Indeed, some of the deceptive sales pitches CenturyLink used were developed by Company managers and discussed at monthly sales meetings.

64. To ensure that the Company kept as much revenue from these improper charges as possible, CenturyLink established a “customer service” apparatus staffed by hundreds of call center representatives who were coached on how to “save” sales and given strict limits on the amount of “credits” they could issue to customers who had been improperly billed. The Executive Defendants knew, through direct communications from subordinates and regular reporting, that these rules and incentives led to rampant illegal cramming. Specifically, and as set forth in detail below, CenturyLink engaged in the following illegal and deceptive “cramming” practices:

- Adding unauthorized services to customers’ bills. As confirmed by numerous former employees, including FE-4, FE-7, FE-11, FE-13, FE-14, FE-15, CenturyLink routinely added services to customers’ accounts without authorization, which would result in customers being charged for services they did not need, request or approve.
- Misquoting and deceiving customers concerning the prices they would be charged, including by misrepresenting or omitting key promotional terms. As reported by FE-5, FE-7, FE-9, FE-11 and FE-13 detailed in complaints filed by the Arizona and Minnesota Attorneys General, CenturyLink routinely represented that a customer would be charged one price for a particular service but would in fact be charged another.
- Misleading customers about other material terms. CenturyLink omitted and concealed highly material contract terms or misled customers concerning significant limitations on their service. As reported by FE-5, FE-9 and FE-11, one established, companywide and management-endorsed practice involved quoting a customer a price without disclosing that the price included additional fees for optional services.

65. These illegal and deceptive practices had a material, undisclosed effect on the Company’s financial condition. As was revealed after the end of the Class Period, these practices resulted in CenturyLink potentially “over-bill[ing] more than 3.5 million

customers”—a number representing over half of CenturyLink’s 5.9 million broadband subscribers and one-third of its 12 million wireline customers.

66. This extraordinary overbilling rate did not happen by accident, or escape the attention of the Executive Defendants. To the contrary, as set forth below, these practices were recorded in the Company’s computer systems, regularly reported to the Executive Defendants and driven by a punitive sales quota system they approved. In fact, CenturyLink itself has admitted that these deceptive sales practices originated in the offices and conference rooms at its corporate headquarters in Monroe, Louisiana. In CenturyLink’s words, its sales and billing “practices are run out of its headquarters” and “the consumer sales and billing channels at CenturyLink have all reported to common management, and have all been subject to common sales and billing policies that apply across all consumer channels.” CenturyLink’s lawyer explained to the Judicial Panel on Multidistrict Litigation that “the decision-makers are in Monroe,” and that CenturyLink’s call centers “just implement the policies from Louisiana.”

**1. CenturyLink’s Senior Management Imposed “Ridiculous” Sales Quotas That Could Not Be Met Without Engaging In Deception**

67. CenturyLink’s billing misconduct was driven by the sales quota system that CenturyLink put in place to meet the ambitious revenue targets that the Company promised Wall Street. The Executive Defendants, including Defendants Post, Ewing, and Puckett, were personally involved in approving revenue forecasts and sales quotas that contemplated and, in fact, necessitated improper sales practices.

68. According to FE-1, sales quotas were based on revenue targets that would be set by senior management during annual meetings. Once the revenue targets were determined, the marketing department would figure out which and how many products needed to be sold to hit those targets – *i.e.*, how many high speed internet connections, Prism TV subscriptions, access lines, etc. Those figures would then be given to Linda Olsen, and she and other directors would divvy up the units by head count and assign quota numbers to each call center. According to FE-1, the quotas were based on the revenue projections that management had set – not on what the Company’s sales force historically achieved. As FE-1 explained, “it was all revenue driven” and did not “make sense” based on prior sales. However, according to FE-1, CenturyLink’s senior management had no interest in looking at any analytics that would take prior sales experience, or any other factors, into account. At CenturyLink, FE-1 said, the “number was the number.”

69. Former Employee No. 2 (“FE-2”), who worked in Financial Planning and Analysis as a Financial Analyst II from April 2013 through April 2016, confirmed that revenue projections would be presented to the Executive Defendants, including Defendants Post, Ewing, Cole, and Puckett, including by FE-2’s boss. The Executive Defendants would then sign off on the projections, and those numbers became the working plan. FE-2, who worked on revenue forecasting and variance analyses for PrismTV, among other things, said that once the Company started receiving the actual numbers, a new analysis was run and the outlook would be updated every quarter, and the Executive Defendants received these updates. According to FE-2, CenturyLink’s revenue forecasts were often out of whack. As FE-2 explained, “A lot of times I’d get unit projections and would think,

‘Are we really going to do this?’ Just looking at what we had done [historically] it was always mind blowing. In a market where we’d never sold over 1,700 units, all of a sudden we’re going to push 2,500 units next month.”

70. Former Employee No. 15 (“FE-15”), who worked as a Regional President in the Southern United States from 2009 through 2014, explained that CenturyLink’s marketing strategy involved trying to compete with cable companies and other providers on price—but then charge fees, terms and charges to help the Company recover the revenue lost by keeping the price point low. FE-15 recalled that, in 2014, “there was a big push to keep the price point low but add fees,” and FE-15 discussed this strategy in meetings with Defendant Puckett, Defendant Bailey and Victory. FE-15 repeatedly voiced concerns about it, particularly to Defendant Puckett, but was told FE-15’s approach was too naïve. According to FE-15, however, “Putting fees out here that mask the issue or not talking about them fairly...I didn’t feel comfortable with that.”

71. According to former CenturyLink sales representatives, the sales quotas established by CenturyLink senior management were impossible to meet without committing fraud. For example, Former Employee No. 3 (“FE-3”), an inbound call center sales representative who worked at CenturyLink from April 2010 through December 2013, confirmed that the Company encouraged deceptive sales practices by having “ridiculous” sales quotas for the numerous products CenturyLink offered. As FE-3 explained, monthly quotas required customer service representatives to sell approximately 20 TV subscriptions, 30 internet subscriptions, 20 regular phone lines, and a certain number of long distance plans, as well as added features like LineGuard, Caller ID, three-way calling

and @Ease. FE-3 said that the sales quotas were unreasonable, and did not reflect what employees who were dealing honestly with customers could be expected to sell.

72. Former Employee No. 4 (“FE-4”), who worked as a CenturyLink Inbound Sales and Care Representative from March 2014 through January 2015, similarly confirmed that CenturyLink’s monthly sales quotas were “insane” and strictly enforced. Indeed, failure to hit the sales quotas for three months in a row was the reason FE-4 was terminated from CenturyLink. FE-4 explained that CenturyLink’s quotas included selling approximately 30-40 phone lines and bundles per month; 25-35 internet subscriptions per month; and seven to 10 television subscriptions per month. FE-4 said that, for in-bound call representatives, these quotas were difficult to meet because most customers were calling in to complain about their bills and wanted to disconnect their service not purchase additional ones. However, according to FE-4, this is what CenturyLink expected inbound call representatives to do: sell additional products and services to complaining customers. FE-4 said that sales representatives were told that they had 10 minutes per call to figure out the customer’s problem, resolve it, and then make a sale.

73. Similarly, Former Employee No. 5 (“FE-5”), who worked as a Consumer and Business Sales Manager in Boise, Idaho from February 2009 through June 2016, said that CenturyLink sales employees repeatedly talked about how “crazy” the Company’s quotas were. According to FE-5, the Company continued to steadily increase the sales goals throughout his tenure and, based on interactions with call center employees, it was clear that “their sales goals were so ridiculously high you had to cheat to get your numbers.” Likewise, according to Former Employee No. 6 (“FE-6”), who worked as an Inbound Sales

Representative from April through September 2015 and sold internet and cable services to residential customers, the sales quotas were “impossible to hit unless you were engaged in shady practices.”

**2. CenturyLink Strictly Enforced Senior Management’s Excessive Sales Quotas By Disciplining and Terminating Employees Who Did Not Meet Them**

74. CenturyLink’s billing misconduct was perpetuated through the strict, punitive enforcement of the sales quotas senior management imposed. As confirmed by FE-1, FE-5, Former Employee No. 7 (“FE-7”),<sup>4</sup> and Former Employee No. 8 (“FE-8”),<sup>5</sup> CenturyLink’s quotas for sales representatives were enforced as follows: In the first month an employee missed his or her sales goals, he or she would be put on a “documented discussion,” a formal discussion with a supervisor that was the first disciplinary step. If the employee missed a sales goal for two months in a row, he or she would receive a written warning; if sales goals were missed for three months there was a formal warning of dismissal; and if goals were missed four consecutive months, the employee would be fired. As FE-5 explained, as the Company raised sales quotas, the monthly targets were harder to meet, which led to sales representatives to “store” any sales in excess of the monthly quota, and then post-date those sales so they would appear on the next month’s statistics.

75. CenturyLink senior management closely monitored compliance with sales quotas, and discussed disciplining sales representatives who missed them every month. As

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<sup>4</sup> FE-7 worked as a Customer Care & Sales Supervisor from 2010 to 2018 in the Midwestern United States.

<sup>5</sup> FE-8 worked as a Lead HR Business Partner from 2012 until 2016.



FE-8 explained, Olsen (CenturyLink's Director of Inbound Sales and Care), the relevant director and manager from each of CenturyLink's call centers, and an HR Business Partner would hold monthly calls to discuss employee sales performance and discipline—including how many representatives missed their targets, the status of the disciplinary action for those individuals, and what the next disciplinary step would be. In those meetings, Olsen and the HR Business Partners would review a spreadsheet that had a tab for each call center, and rows for each of the employees at each center. The spreadsheet rows would turn red if an employee did not hit their numbers. The excel sheet also included notes for the disciplinary actions taken for poor sales performance, as well as detailed information concerning the performance of each representative (including gross revenue, revenue per order, revenue per call, calls per hour, and revenue per hour). In fact, according to FE-8, most Company personnel – including the Executive Defendants (including Defendants Post, Ewing and Puckett) – had access to a dashboard system that provided nearly up-to-the-minute data on sales and revenues, including employee-level information. The workbooks would reflect this effectively “real time” data, and would also include notes on any disciplinary action taken for cramming.

76. As FE-3 explained, the high employee turnover rate at the Company illustrated that the quotas were unobtainable – about 15 to 30 new employees were brought in every other month, maybe a third would be with the Company three months after training. After three years, FE-3 was the eighth-most senior employee in a 60-employee call center. FE-3's own experience at CenturyLink illustrates just how unreasonable the quotas were. In 2012, FE-3 was named a Circle of Excellence honoree, meaning that

her/his sales were in the top 1% of the Company and s/he had a picture taken with Defendant Post. However, the following year, when FE-3 was responsible for selling PrismTV, s/he was terminated for failing to meet CenturyLink's monthly quotas.

77. Significantly, CenturyLink sales representatives were not the only employees accountable for meeting quotas – call center supervisors, managers and directors were as well. Former Employee No. 9 (“FE-9”), who worked at CenturyLink from 2002 through 2016, including as a Residential Customer Service Representative and as a National Order Help Desk (“NOHD”) Representative in the Midwestern United States, explained that this environment not only drove unethical behavior, but a tendency for call center managers not to do anything about it. Although supervisors could terminate employees for unethical conduct, there was no reason to do so because of the need to hit quotas.

78. CenturyLink's sales goals were enforced even when, as inevitably occurred, doing so resulted in a majority of sales employees being disciplined. According to FE-8, for about seven months in a row in 2014, over half of all employees would have been written up for failing to meet the monthly quota. Similarly, FE-1 similarly estimated that about 70% to 80% of all sales agents could be in corrective action at one time.

79. But at CenturyLink, the quotas were never adjusted. FE-7 said that when he questioned Olsen about strict enforcement of sales quotas, she responded: “That's our culture. If you don't get to 90% [of your quota], we're going to churn to the next person.”

80. The sales quotas imposed by CenturyLink, and the punitive manner in which they were enforced, contrasted sharply with the practices at the predecessor companies that

CenturyLink acquired. For example, Former Employee No. 10 (“FE-10”), who began her/his career at Embarq and then worked at CenturyLink in the NOHD in the Southern United States from July 2009 through December 2016, said the sales culture changed dramatically after CenturyLink took over: “It became totally toxic.” According to FE-10, “CenturyLink only cared about profits.”

### **3. CenturyLink Managers Instructed Employees on the Deceptive Sales Pitches that Sales Representatives Would Use to Cram**

81. The Company’s management not only encouraged cramming through its aggressive quotas, but also specifically instructed sales representatives to use deceptive sales pitches and promotions, and even disciplined employees for failing to do so. For example, according to FE-9, during every sales training s/he did at CenturyLink throughout out a 14-year career, the trainers would instruct representatives that they could quote a single price for internet service without disclosing underlying fees (such as the maintenance fee, internet recovery fee, and other charges) that might be included, so long as the customer did not ask. These instructions were given at monthly sales meetings and sales strategy courses by Company trainers and would have been approved by Olsen, FE-9 said, because “everything” on training “had to go past her desk and be approved beforehand.” According to FE-9, representatives were specifically told that if a customer “doesn’t ask you don’t have to tell them” that the single quoted price included other, optional products. FE-9 was even disciplined for not hitting quotas because s/he spent too much time, according to his superiors, telling customers what their actual charges would be.

82. FE-5 likewise said that when s/he attended a training class, “the facilitators were straight up telling new hires just to tell people what the total price was and not what all the items were”—which FE-5 knew from her/his experience was in violation of both Company policy and federal regulations. Former Employee No. 11 (“FE-11”), who worked as a Retention Specialist from 2006 through 2016 in the Southeastern United States, similarly confirmed that this practice – quoting one price but not disclosing that individual services included in the package were optional – would be encouraged by his/her call center manager at monthly meetings. According to FE-11, “That is cramming; it’s highly illegal, and we were instructed to do it.”

#### **4. CenturyLink Secretly Transformed Its “Customer Service” Department Into A Sales and Revenue Retention Operation**

83. CenturyLink’s billing misconduct was also facilitated by CenturyLink’s creation of a “customer service” department whose primary function was to sell services—not resolve complaints or provide customer service—as well as a complaint escalation department that was designed to minimize any refunds the Company owed customers.

84. During the Class Period, CenturyLink employed approximately 250 to 450 “retention specialists” who were tasked with preventing customers who would complain about their bills from terminating their contracts with CenturyLink. Former Employee No. 12 (“FE-12”), who worked as a Retention Specialist from December 2015 through December 2017 in the Southeastern United States, explained that retention specialists’ compensation was tied to the number of accounts they could “save” – *i.e.*, prevent from disconnecting – and that retention specialists were instructed to “save by selling.” FE-12

said that retention specialists would get a bonus if their retention rate was 85% or higher—meaning they were able to “save” 85% or more of all threatened disconnects.

85. Even though retention specialists were responsible for addressing billing disputes and “saving” customer accounts, FE-12 said that retention specialists were limited in the amount of “credits,” or refunds, they could offer customers to resolve billing disputes. Specifically, credits for more than \$50 needed a supervisor’s approval, and the Company’s computer systems made it physically impossible to give back credits for more than three months’ worth of charges. Along similar lines, FE-10 reported that retention specialists were limited to giving out credits of around \$3.50 to \$5 per customer. At the same time, FE-11 reported, retention specialists were also required to sell CenturyLink services, and had minimum sales quotas just like regular CenturyLink sales representatives.

86. In addition to a team of “retention specialists,” CenturyLink also created a National Order Help Desk, or NOHD, that handled customer “escalation” complaints – *i.e.*, complaints in which a customer demands to “speak to a supervisor” – to account for the overflow of calls the Company received about improper bills and other complaints. FE-9, who worked at the NOHD from 2009 through 2015, explained that approximately 90% of the escalation calls s/he received were from customers complaining that they had fees and charges added onto their accounts without their knowledge. According to FE-9, if the customer was able to prove he or she had been misquoted, NOHD employees offered to honor the misquoted price for the current month and the next month—but would not honor the price for a longer period than that.

87. But CenturyLink made it difficult for customers to receive any refund at all. According to Former Employee No. 13 (“FE-13”), who worked as a NOHD Consultant from 2010 until 2014 in the Western United States, CenturyLink made it nearly impossible for customers to successfully challenge the wrongful charges they incurred. FE-13 explained that it was the Company’s policy that customers had the responsibility to confirm the accuracy of their bill, and if they did not verify the information provided during their price quote, that was their problem. FE-13 explained that, because recordings of sales calls were only kept for about a month, it was virtually impossible for a customer to challenge a misquoted price or fraudulent bill. This is because under most promotions, the first month would be free, and customers would only receive their first “real” bill after that. According to FE-13, time was the biggest ally to the Company when it came to customer disputes. The Company put the burden on customers to prove the Company was wrong, but also implemented a policy of deleting the call recordings—the evidence that could show the customer had been misquoted—at around the same time the customer would learn he or she had been misled.

## **5. CenturyLink’s Enforcement of Unobtainable Sales Quotas Led to Rampant Cramming**

88. The combination of quotas set without regard to sales representatives’ ability to meet them and the severity with they were enforced led to the expected result—customer service and sales representatives turned to deceptive sales practices.

89. According to FE-11, cramming was “happening all the time, all day, every day,” and that representatives who engaged in these practices included high sales

performers who the Company named as “Circle of Excellence” honorees. Similarly, FE-13 said that, while s/he worked in complaint escalations, s/he received calls from customers complaining that their bills charged different rates than they were quoted – and from customers who had been wrongfully charged early termination fees – every single day. FE-13 said that s/he also received calls from customers who said that phone lines appeared on their bills that they had not requested once or twice per week. According to FE-13, there was a lot of cramming and unethical behavior, that cramming was widespread throughout the Company, and that it was encouraged by the Company’s aggressive enforcement of sales quotas.

90. FE-7, who served as a Customer Care & Sales Supervisor, explained that there were “many, many instances of people doing things that we knew were unethical,” including cramming. FE-7 explained that one frequently “slammed” service was the Company’s @Ease computer protection package, which, at one point, cost \$5 per month for a two-month promotional period, and would then increase to \$10 per month after the promotional period ended. According to FE-7, sales representatives would add @Ease service to customers’ accounts without explaining that the promotional rate would expire or that they were adding the service at all, as sales of these products enabled representatives to meet their corrective action limit quota. As FE-7 explained, adding @Ease “counted as a sale and would make sure you weren’t going to lose your job for missing your numbers.” FE-4 similarly confirmed that adding CenturyLink’s @Ease service to a customer’s bill was a common, daily occurrence. Although CenturyLink did not explicitly instruct employees to add @Ease without the customer’s knowledge, the culture at the Company

encouraged this conduct. FE-4 said that CenturyLink wanted employees to sell, and there were never any negative repercussions for adding services like @Ease to customer accounts.

91. Former CenturyLink employees explained that the same “cramming” practices used in residential sales were also employed when selling to small-medium business customers. Former Employee No. 14 (“FE-14”), who began as a sales representative on the residential side in March 2014 but was then promoted to the small business and enterprise units before leaving the Company in October 2017, explained that sales representatives who “crammed” customers were the best performers, and thus were promoted to the business side. After being promoted, FE-14 explained, those same individuals would continue the same practices that led to their promotion in the first place.

92. FE-14 described a typical tactic: a representative selling CenturyLink’s small business services would tell a customer the options, provide a quote, and tell the customer to call back when the customer was ready to complete the order. However, the sales agent would then secretly place the order at that time and label the sale a “self-install.” A “self-install” was selected to ensure that a technician would not arrive at the customer’s business and alert the customer to the fact that service (from CenturyLink’s standpoint) had, in fact, been ordered. FE-14 repeatedly received phone calls from customers looking to complete an order and would pull their information up on the Company’s computer system and see that the order had in fact been placed during the original phone call. FE-14 reported instances of orders already having been placed, and was told management would



investigate the problem, but did not see any evidence that anyone was ever disciplined for this practice.

93. The financial impact of these cramming practices was highly material. Indeed, thousands of consumer complaints, including those obtained through Plaintiffs' open records requests and the Minnesota Attorney General's investigation, reveal that CenturyLink customers—including elderly consumers living on fixed incomes—were routinely overbilled hundreds of dollars each, and that the Company institutionalized a policy of refusing to honor confirmed, quoted prices. For example:

- L.F. switched to CenturyLink to save money, but her/his first bill was more than double the price CenturyLink had quoted. L.F. contacted CenturyLink and was told that s/he would receive credits for the overcharge, but the next month's bill was even higher. L.F. called CenturyLink in November 2013 requesting to disconnect his/her service, but continued to receive bills despite calling the company a second time in November, three times in January 2014, and two more times in February 2014. CenturyLink refused to cancel L.F.'s bill of \$412.31 for services that L.F. sought to disconnect months before.
- J.F., a retired engineer, was offered internet service for a base rate of \$19.99 per month, but received a bill for \$367.33, including internet service for a base rate of \$71. CenturyLink told J.F. that the Company had "verified" the \$19.99 offer but would not honor the promised rate.
- S.H., a 70-year-old former director of a non-profit organization, purchased a CenturyLink package that the Company said would cost approximately \$54 per month. S.H. was charged \$103.87 and after calling CenturyLink, was promised that the bill would be fixed—but the Company charged \$76.46 and \$77.96 the following two months.
- When S.J. signed up for CenturyLink's internet service in October 2016, she was told by a CenturyLink representative that she could cancel without paying an early termination fee. A few months later, when S.J. tried to cancel, she was told that she would have to pay a \$200 fee. The company refused to honor its promise to cancel her

service for no charge and instead offered to reduce the \$200 cancellation fee to \$146.20.

- K.T., a 76-year-old retiree, was promised a rate of \$62.14 and \$40.91 for the first and second months and then \$85.92 per month for the rest of the year—but he was actually charged \$172.24 the first month, or more than \$100 above the promised price. CenturyLink then falsely promised to fix his bill.
- M.H., who is 81 years old and lives on a budget, agreed to keep her service after CenturyLink promised her the same rate for another year—but CenturyLink increased her bill and then charged her a series of changing rates. CenturyLink then refused to give her the rate she was promised, claiming that there were no promotion that could give her the promised price, and then threatened to charge her a \$200 cancellation penalty if she terminated her service—even though the CenturyLink agent she spoke to confirmed that the Company had lied to her.

94. The above examples illustrate the financial impact of CenturyLink’s cramming practices, which was so sizeable that it could not have escaped the attention of the Executive Defendants.

## **6. CenturyLink Documented Instances of Cramming and Reported Them to the Executive Defendants**

95. In all events, CenturyLink’s senior management and the Executive Defendants were directly informed of the Company’s cramming practices, and the rampant billing misconduct that was at the core of the consumer and small business sales strategy.

96. To start, the Company’s improper sales practices were documented and monitored through the Company’s “quality assurance” program, and reported to managers through a “coaching” process that focused on ensuring sales and rarely led to discipline for billing misconduct. For example, NOHD employees were instructed to record and “coach” sales representatives about mishandled calls and, in doing so, routinely documented

instances of cramming and other improper sales practices in the Company's computer systems, and communicated the violations to the representatives' supervisors. FE-9 explained that NOHD representatives were to investigate the reasons behind a customer's complaint and document them in a report in the Company's Order Quality Management, or OQM, system. According to FE-9, NOHD representatives would document cramming incidents in the OQM, which included various "codes" for violations of Company policy. These codes were listed in a drop-down menu and included, for example, misquoting a price, making improper or inaccurate notes in a customer's call history, or placing an "unauthorized service on account" – the Company's code for "cramming." FE-10 said that, at one point, s/he was filling out a form for reports addressing unauthorized charges at least once a day and, at minimum, at least once or twice per week. As both FE-9 and FE-10 reported, OQM reports were automatically sent to the sales representative's supervisor, who was then responsible for "coaching" the representative and addressing the violation.

97. But because supervisors' compensation depended on meeting quotas, the corrective "coaching" or discipline rarely occurred. According to FE-9, although sales representatives were ostensibly supposed to have a quality rating of over 93% (meaning they could not have more than 7 OQM findings for every 100 calls), FE-9 knew of representatives who were reported for cramming every day who were never reprimanded. As FE-9 explained, "How many times do I have to ding this person? How do you keep them and not fire them? It was because just their immediate supervisor was reviewing them. The supervisor would discuss the OQMs with them and could [fire] them or

discipline them. But if I'm a supervisor why would I do that if they're selling all that stuff?"

98. FE-7 similarly reported that, despite extensive documented instances of cramming, responsible employees were rarely disciplined. FE-7 explained that when investigating complaints of cramming, s/he would pull the recording (if one existed) of the phone call, allow the representative to listen to it and allow the representative to explain the other side of the story, and then formulate a recommendation for FE-7's supervisor, the Call Center Director, who would then discuss the issue with Human Resources. FE-7 stated that there were a lot of sales representatives who were repeat offenders and had multiple documented incidents of unethical sales conduct but were not disciplined. FE-7 recalled one sales representative who had 13 documented cases of unethical sales behavior that were logged in the Company's coaching database but was never disciplined. FE-7 said that, because s/he had access to the Company's coaching database, s/he could see complaints s/he had made about certain sales representatives did not result in any corrective action. When s/he failed to see any corrective action measures taken, FE-7 would call the Company's integrity or "tips" line, which would assign a confirmation number to the complaint that could be used to check on any follow-up investigation. In numerous cases, FE-7 would report instances of cramming, and go back and check the status of the complaints s/he reported. None of those complaints were ever updated to reflect they had been addressed.

99. The sales practices used at the Company's call centers were also documented and reviewed by a separate Quality Assurance department. As explained by Former

Employee No. 16 (“FE-16”), who worked as CenturyLink’s Manager of Customer Experience from April 2011 to July 2015, the Company’s Quality Assurance team would review four calls made by each sales representative every month, score those calls, and provide feedback in reports in a system called Q-FINITY. The calls would be scored by a team of approximately 88 workers (66 contracted by an overseas outside vendor and 22 located in the U.S.) on about 26 or 27 different metrics or questions, such as whether the representative reviewed what the customer currently had in service, offered the customer other products, and quoted the correct rates and internet speed. Once a call was reviewed and scored, the representative’s supervisor would be notified by email, and could then pull up the report on the Q-FINITY system. Any team leader, director or vice president also had access to the QA call scores, and every month FE-16’s team would compile a report that was sent to team leaders, directors, VPs, and regional VPs analyzing trends and other metrics from the scoring data.

100. Two circumstances prevented this QA review from providing an effective check on inappropriate sales behavior. First, according to FE-16, the review and enforcement of the QA findings was the responsibility of call center supervisors who were not incentivized to discipline employees. As FE-16 explained, although the QA results were at one time factored into compensation for call center managers and supervisors, the QA metric was removed from monthly bonus compensation in 2014 for all call center director-level employees and below—a decision that was implemented by Olsen and approved by Senior Vice President Consumer Sales & Care, Kathy Victory. As a result, according to FE-16, “supervisors were 100% not incentivized for QA.”

101. Second, the QA department was effectively eliminated in February 2015 for cost reasons, and the responsibility for QA was given to call center supervisors. FE-16 had “grave concerns” over the elimination of the QA department, which s/he expressed to Olsen and Victory, given “how valuable our practice was in calling out inappropriate behaviors and changing behaviors at the call centers.” FE-16 explained that moving the QA process in-house and having supervisors review calls was not effective because poor reviews made the supervisors look bad. As a result, after the QA department was eliminated, “supervisors were not conducting reviews at all” and “were just checking the boxes they needed to.”

102. Despite the fact that CenturyLink employees who routinely witnessed cramming and other deceptive sales practices reported that this misconduct was rarely punished, the conduct was so widespread that – even though “rarely” addressed – the Company’s human resources department still disciplined employees for cramming on a routine basis. FE-17, who was Director of Human Resources for consumer and small business sales from April 2011 until December 2016 and oversaw over 8,000 employees, said her/his team received complaints from call center sales employees about the unreasonableness of sales goals and would get exit survey data from employees who left the Company who said they were not being paid enough to be put under the kind of pressure they were subjected to. FE-17 said that CenturyLink employees were frequently terminated for cramming accounts, and those employees would tell Company investigators that they crammed customer accounts because they were under pressure to make sales and felt they had to do so or would risk losing their jobs. FE-17 said the cramming issues were

documented in exit interviews, and that these facts were shared with call center directors, as well as FE-17's supervisor, Vice President of Human Resources Kathy Flynn. Former Employee No. 20 ("FE-20"), who worked as an HR Business Partner from 1995 through April 2015, similarly confirmed that cramming and unethical sales behavior was always an issue at CenturyLink, employee turnover was horrible, and the major reason people would leave was due to the fact that sales goals were impossible to meet—a concern that was expressed to CenturyLink's HR department during exit interviews and other separation processes.

103. The complaints concerning customer cramming and other deceptive sales practices were also regularly reported to the Executive Defendants in monthly reports generated by the Company's Executive & Regulatory Services division. Former Employee No. 18 ("FE-18") worked as one of three managers of that division from 2009 through March 2014 and was responsible for handling complaints from the FCC, state attorneys general and the Better Business Bureau, as well as "executive complaints," or formal written complaints to Defendant Post and other "C-level" executives. FE-18 dealt with hundreds of complaints per month, and the majority of those were customers who said they had been defrauded through cramming or otherwise improperly billed. Of the cramming complaints FE-18's team reviewed, about half were substantiated and "did, in fact, happen like the customer said it did." FE-18 explained that top performing sales employees and Circle of Excellence honorees were frequently identified as repeat offenders – *i.e.*, were identified in customer complaints for cramming – and that FE-18 and other managers in her/his division repeatedly told Victory that this was the case. Former Employee No. 19

(“FE-19”), who worked as a Manager of Executive Complaints from 2009 through June 2013, similarly reported that top sales performers were often the worst offenders regarding cramming, a fact that FE-19 team looked into and confirmed multiple times.

104. FE-18’s team emailed monthly reports to CenturyLink’s senior leadership – including Defendant Post, Defendant Puckett, Victory and Olsen – reporting on the number, types and categories of complaints from the FCC, state agencies, the BBB and direct customer escalations. According to FE-18, the majority of the complaints were billing related, and the reports specifically identified “slamming/cramming” as a complaint category. As FE-18 explained, the data on these complaints were discussed with CenturyLink senior management, including Victory, on conference calls focused on operations reviews. FE-16, who was involved in this monthly reporting, confirmed that billing complaints were always one of the key things the reports would analyze. According to FE-16, the “complaint that always stood out was misrepresenting prices. We always had those issues.”

105. FE-19 likewise confirmed that Defendant Post, Defendant Puckett, and Victory were sent and reviewed monthly reports concerning the cramming complaints that CenturyLink received, and those reports included specific category of complaints for cramming—a “very common and widespread” issue cited by customers. According to FE-19, after reviewing the reports, Defendant Post, Defendant Puckett and Victory would often complain to FE-19 that the number of complaints was inaccurate and too high. As FE-19 explained, the numbers reported to senior management were accurate – and FE-19 would confirm the accuracy of the reports and the team’s process to Defendant Post, Defendant



Puckett and Victory, who never provided any justification for believing the numbers were wrong. According to FE-19, this was because Defendant Post and Defendant Puckett knew the numbers were accurate and only claimed they were not “so they didn’t have to deal with it.”

106. FE-19’s team was responsible for investigating customer complaints submitted by regulatory bodies like state Attorneys General, public utility commissions, and the FCC, and would review an average of 4,000 complaints per month, half of which were related to billing issues and cramming, as well as customer escalation complaints about cramming addressed to Defendant Puckett and Defendant Post. Defendant Post would often ask FE-19’s team to look into complaints addressed to him, resolve them, and report back. When FE-19 would report back to Defendant Post about the resolution, he would often complain about it—typically, according to FE-19, Defendant Post would say that FE-19’s team had given the customer too much compensation.

107. FE-19 explained that, despite the substantial number of complaints and evidence of cramming – which was clearly occurring in every state in which CenturyLink did business – CenturyLink’s senior leadership refused to meaningfully address the problem. FE-19 said that FE-19’s team would provide recommendations about what could be done to reduce cramming to Defendant Post, Defendant Puckett and Victory, but they never acted on those recommendations.

108. According to FE-19, this was because Defendant Post, Defendant Puckett and other senior executives were not willing to lose revenues in order to reduce the number of complaints. To illustrate, FE-19 described CenturyLink’s response to at least four state

Attorney General civil investigative demands issued between 2009 and 2013 in which 600 out of 700 consumer complaints (or 83%) were substantiated by FE-19's team. Despite repeated civil investigative demands, CenturyLink refused to change its practices. According to FE-19, CenturyLink senior leadership simply did not take the Attorney General investigations seriously—indeed, FE-19 reported that senior management would rather “just pay the fines” than “kowtow” to state Attorneys General.

**C. CenturyLink's Senior Management Recognized the Unsustainability of the Company's Boiler Room Sales Practices and Secretly Attempted to Address Them**

109. By the beginning of the Class Period, the Company's improper sales practices became a central focus of the Executive Defendants. In April 2014, FE-5 alerted both her/his manager, Northwest Region Vice President Brian Stading, and Defendant Bailey of the cramming issues s/he encountered. Specifically, on or around April 23-27, 2014 at the Company's "Circle of Excellence" event at the Breakers Hotel in Palm Beach, Florida, Stading introduced FE-5 to Defendant Bailey specifically so that FE-5 could address the constant and rampant cramming and misquoting problems s/he encountered to CenturyLink's most senior-level managers. In that discussion, FE-5 explained the complaints and issues with cramming s/he was experiencing. In response, Defendant Bailey acknowledged these cramming issues were occurring, and told Stading and FE-5 that “We've got to do something about our call centers.”

110. After this discussion, Defendant Post sent out a corporate-wide email saying that the Company was creating a new position for Defendant Bailey on business ethics and how the Company deals with customers. After receiving the email announcing the new

position, FE-5 sent Defendant Bailey an email reminding him of their conversation at the Breakers and asked to be a part of the team that was going to be fixing the call center issues.

111. At around the same time, CenturyLink's senior management began to develop a new behavioral coaching model for its sales employees—another action that was prompted by the complaints the Company's cramming and deceptive practices had generated. In 2014, FE-17's team developed a new way to measure employee performance. Instead of judging employees on numerous metrics, which FE-17 said were impossible to meet, FE-17's team developed a new "behavioral coaching" model which judged employees on three overall criteria: how many customers did the employee help, did the employee resolve all issues the customer presented, and did they provide good customer service. Flynn was convinced to adopt this change, and supervisors were trained to provide behavioral coaching (rather than focusing on metrics) using this criteria. According to FE-17, when this new system was rolled out, it was initially well received. Defendant Post recognized Flynn for her work on the project, and employees provided positive feedback, boosting morale. According to FE-17, the number of complaints from customers declined significantly, as did terminations for unethical behavior.

112. However, after only a few months, CenturyLink's sales numbers took a downturn. According to FE-17, after the decline in sales, the Company's senior management reverted back to the old metrics system almost immediately because CenturyLink senior management could not tolerate any drop in sales.

113. Numerous other former employees confirmed the change in the disciplinary model, and the impact on sales. For example, FE-20 confirmed that the switch to

behavioral coaching model was done, in part, as an attempt to lower the number of cramming incidents. FE-20 described how employees who were determined, through an HR investigation, to have committed unethical sales behavior would say that it was something they felt they had to do in order to keep their jobs—and the effort to reduce this pressure motivated the switch to behavioral coaching. According to FE-20, “Recruiting couldn’t even keep the turnover. We were having so much discipline and so many investigations, and we were hearing in the exit interviews that it was because of the sales quotas,” so CenturyLink had to stop enforcing them so strictly.

114. Similarly, FE-1 recalled a change in corrective action policy around 2014 whereby sales representatives received behavioral coaching while supervisors were to be held accountable for sales numbers. According to FE-1, after this change was adopted, sales fell off “very quickly,” and thereafter the Company went back to the old model of enforcing quotas at the sales representative level. Similarly, FE-8 recalled a change to a behavioral coaching model in 2014-2015 which was less focused on a metrics-heavy scorecard. Like FE-17, FE-8 said that while the change was initially well received, it immediately led to a significant drop in sales. As FE-8 reported, “I remember results dropping drastically when people were no longer being managed to a number.”

115. Rather than reveal the truth – that the Company was desperately trying to address the deceptive company-wide sales and marketing practices at the Company’s call centers that had secretly driven a material portion of the Company’s reported results – CenturyLink concocted a false story to explain the revenue declines. For example, in announcing CenturyLink’s 2014 fourth quarter results on February 11, 2015, Defendant

Post blamed the “weaker” revenues on a recent reorganizational alignment and warned that this realignment could “result in some additional negative impact on our sales momentum in the first half of 2015”—an explanation that provided cover for the sales dip associated with the Company’s relaxing of the strict quota-enforcement system, and the time needed to ramp sales back up again after the behavioral coaching model was aborted. When the Company’s first quarter results and CenturyLink’s consumer segment missed revenue estimates, Defendants again blamed the sales alignment, and again, analysts credited Defendants’ explanations. For example, UBS noted that consumer segment revenues were approximately \$8 million below estimates while Oppenheimer—which also expected better results—noted “[w]eakish [f]undamentals” in the consumer segment. No analyst suspected that these results were driven by CenturyLink’s attempt to remedy cramming.

116. Just a month later, on June 2, 2015, and just three months after the Company announced that Defendant Puckett had been promoted to the head of global sales, CenturyLink announced that Defendant Puckett was leaving the Company. No explanation was given for her departure. A press release announcing the move quoted Puckett as saying that she was “looking forward to spending more time with my family and considering other leadership opportunities that allow me to continue to have a significant impact.”

117. Shortly thereafter, CenturyLink’s return to the metrics-based system and strict enforcement of sales quotas began to take hold. For example, during the Company’s third quarter 2015 earnings call on November 4, 2015, Defendant Post highlighted a “solid quarter” in the consumer segment, with revenues growing \$18 million year-over-year. Defendant Post did not disclose the true driver of this sales growth—*i.e.*, the Company’s

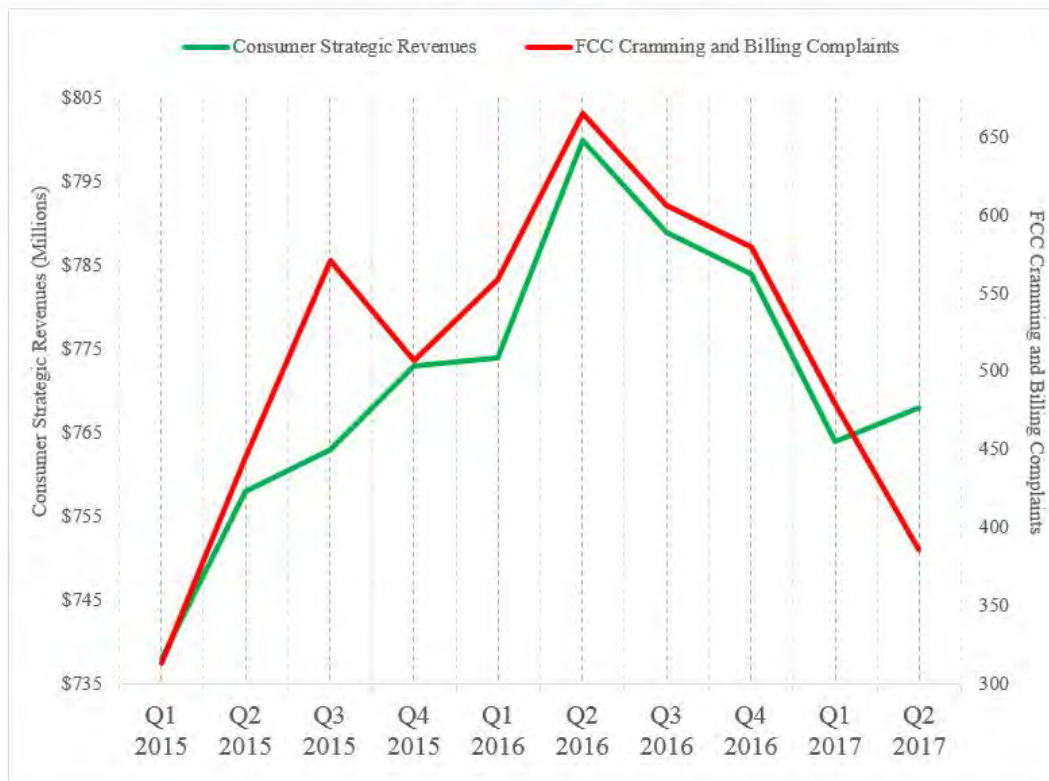
undisclosed cramming practices—but rather credited CenturyLink’s strategy of “attracting more high-value customers” and pursuing “higher value bundled sales and select pricing increases.”

118. By year-end, the return of the Company’s prior sales practices had taken effect, and the Company was able to again report favorable results to Wall Street. For example, in announcing year-end results on February 10, 2016, Defendant Post attributed the reported rebound in revenues to the “aggressive corrective action” the Company had taken, as well as the realignment of the sales force and new leadership appointments (*e.g.*, Douglas’s replacement of Puckett). For his part, Defendant Ewing told investors that “churn reduction” as well as a concerted effort to “keep the customers we have and try to make some of the price declines and credits that we’ve been issuing smaller” led to the improved results.

119. These representations had their intended effect, and reversed a nearly year-long share price decline. Analysts at UBS noted that the Company’s financials were above guidance and ahead of UBS’s expectations, and that “revenues beat across the board.” Barclays likewise cited the “healthy strategic services growth led by solid consumer results,” calling out the 6% year-over-year revenue growth in consumer revenues and higher ARPU, while JPMorgan analysts were reassured and “expect[ed] revenue trends to continue to move in the right direction.” Over the next several trading days, the Company’s shares shot up, increasing over \$4 per share, and began trading at their highest levels in over six months.

120. Data that Plaintiffs obtained through FOIA requests to the FCC confirm that customer complaints and consumer segment revenues tracked the Company's efforts to address the widespread deceptive billing practices at the Company. Based on quarterly data obtained through a FOIA request to the FCC (which was only available for the first quarter of 2015 to the present), the number of customer cramming complaints rose dramatically after the Company abandoned the behavioral coaching model and reverted back to its strict enforcement of sales quotas. The uptick in complaints since the beginning of 2015 is all the more striking given that, as complaints were growing, the number of CenturyLink subscribers was decreasing substantially throughout the Class Period.

Consumer Strategic Revenues vs. FCC Cramming and Billing Complaints  
Q1 2015 – Q2 2017



**D. The SEC Questions CenturyLink About Its Consumer Segment Disclosures and the Company's Compliance With Item 303**

121. At the same time CenturyLink publicly attributed its rejuvenated revenue growth to a shift in strategy, the Company was pointedly instructed by the SEC to disclose any known trends that impacted its consumer segment results. Specifically, in correspondence from the SEC's Division of Corporation Finance on August 11, 2015 to Defendant Cole, the SEC requested that CenturyLink provide more information concerning the revenue composition of the Company's consumer segment, as well as the Company's "marketing and sales efforts" of its "strategic" services. In doing so, the SEC specifically cited the Company's need to comply with Item 303(a) of Regulation S-K and Securities Act Release No. 33-8350, which requires disclosure of, among other things, "any known trends or uncertainties that have had or that the registrant reasonably expects will have a material favorable or unfavorable impact on net sales or revenues or income from continuing operations."

122. Under Item 303, CenturyLink was required to disclose the fact that the Company's illegal and deceptive sales practices were a material driver of the Company's reported revenue in the consumer and small business segments—and that the Company's efforts to alter those practices, and reduce cramming, had resulted in a decline in revenue. CenturyLink's senior management were aware of and/or specifically approved significant changes to the Company's sales employee discipline and compensation scheme in order to address these practices. The Executive Defendants further recognized that, when these changes were made, they immediately and materially impacted revenues. Moreover, that



revenue decline was so significant that CenturyLink reverted back to its prior method of disciplining sales employees almost immediately.

123. On September 8, 2015, the SEC again questioned CenturyLink about the Company's disclosures concerning the operating performance of its consumer segment, stating that additional information about the operating margins of strategic and legacy services was necessary and "material for a complete investor understanding."

124. In a September 22, 2015 response letter to the SEC from Defendant Cole, which copied CenturyLink's Audit Committee Chair W. Bruce Hanks, CenturyLink misleadingly claimed that "price compression and customer disconnects caused by competition" were the primary drivers of performance. In other words, despite the clear requirements of Item 303 and the Executive Defendants' knowledge that changes in the Company's sales practices had dramatically impacted consumer revenues – and despite being directly questioned about it by the SEC – CenturyLink continued to conceal the material impact its sales practices was having on the Company's financial performance.

**E. A CenturyLink Director Loudly Resigns, Warning that His Removal and Defendant Post's Conduct Raised "Serious Governance, Transparency and Honesty Issues"**

125. Shortly after CenturyLink responded to several pointed questions from the SEC about its consumer segment disclosures, one of the Company's longtime directors accused CenturyLink and Defendant Post of conduct that raised "serious governance, transparency and honesty issues," and warned the Company that a press release it had prepared was "incomplete and inaccurate" and "deliberately misleading in a material way."

126. Specifically, beginning in November 2015, Defendant Post and other senior members of the Company's Board began to orchestrate the removal of former director Joseph Zimmer, who had served on the Board since 2003 and was then one of four members of the Company's audit committee. As a member of the audit committee, Zimmer would have been aware of and reviewed the Company's responses to the SEC about the lack of disclosure surrounding the Company's consumer segment.

127. As revealed in email correspondence that Zimmer forced CenturyLink to publicly file with the SEC, Zimmer was presented with an ultimatum by the Board's chair in December 2015 after several directors "decided [Zimmer] had to go." Zimmer said his forced resignation was improperly orchestrated without input from the rest of the Board, and was contrary to their wishes. As Zimmer put it, except for the "Monroe or Monroe related directors," all disinterested Board members said that removing Zimmer from the Board "was wrong, that it was not good for the company, that I added a lot of value, that I was an important and needed voice on the board."

128. Most concerning for investors, however, is that the facts surrounding Zimmer's ouster would not have become public if Zimmer had not forced the Company's hand by specifically stating in an email to Defendant Post, Board Chairman Bill Owens, CenturyLink General Counsel Stacey Goff and CenturyLink's outside counsel that "[a]nything short of disclosing the full and accurate account of events would be misleading in a material way." At Zimmer's suggestion, CenturyLink publicly filed the emails he exchanged with them in a Form 8-K on January 25, 2016.

129. As reflected in that correspondence, CenturyLink’s senior leadership went to significant lengths to conceal the true facts concerning Zimmer’s ouster. As Zimmer told Defendant Post and Goff in those emails, the original draft press release CenturyLink prepared announcing Zimmer’s departure was “incomplete and inaccurate” and “deliberately misleading in a material way.” As Zimmer explained, the conduct of the Company’s senior leadership “raised serious governance, transparency and honesty issues” – and only further corroborates the Executive Defendants’ proclivity to mislead.

130. After the end of the Class Period, Zimmer’s replacement, Martha Bejar, was one of the two members of the Board appointed as the “special committee” responsible for investigating the billing misconduct at issue in this case.

**F. The Arizona Attorney General Investigates and Accuses CenturyLink of Fraudulent and Deceptive Conduct, Which CenturyLink “Expressly Denies”**

131. After CenturyLink returned to its prior sales model, billing complaints again began piling up—leading consumers to lodge complaints with their state attorneys general. Those state attorneys general soon began to investigate the reasons behind the rising tide of complaints against the Company.

132. Beginning no later than March 2016, the Arizona Attorney General launched such an investigation. This investigation found that CenturyLink had engaged in numerous deceptive practices in the sale and marketing of internet and telephone services that violated the Arizona Consumer Fraud Act and, specifically, that CenturyLink had:

- Failed to adequately disclose material qualifying conditions that applied to promotional rates, such as the requirement that consumers enter into a term commitment or that they authorize CenturyLink to

automatically withdraw monthly payments from their financial accounts;

- Failed to adequately disclose the advertised promotion rate would end before the consumers' term commitments expire, thus requiring consumers to continue purchasing services at a non-promotional rate for the remainder of the term;
- Failed to disclose that if consumers cancel their contract before their term commitment expires, they will be charged an early termination fee;
- Failed to disclose that a consumer will be required to purchase or lease a modem-router for high speed internet service;
- Failed to disclose that a consumer would be charged an installation fee for certain services;
- Billed consumers at rates higher than those it represented during sales calls with consumers;
- Billed consumers an early termination fee when the consumer cancelled his or service upon discovering that CenturyLink was charging the consumer higher rates than those it represented during the sales call;
- Billed consumers for periods of service before such services were connected, for services that were never connected, and for products that were never received, without subsequently giving those consumers a credit for such charges;
- Billed consumers for services and products that the consumer never requested without subsequently giving those consumers a credit for such charges;
- Failed to process consumers' service cancellation requests in a timely manner and billing them for the period of time such service remained connected following the consumers' requested cancellation date, without providing a subsequent credit for such period of time; and
- Charged consumers full price for leased modems that consumers returned to CenturyLink within the required time frame and, in many

cases, subsequently referring the consumers' accounts to collection when the consumers refused to pay for returned modems.

133. In the face of the Attorney General's findings, CenturyLink quietly agreed to a settlement in which it promised to take a number of measures intended to prevent consumers from being misled and improperly charged. Specifically, on April 6, 2016, CenturyLink entered into an Assurance of Discontinuance with the Arizona Attorney General in which the Company (falsely) denied any wrongdoing, and where it "expressly denie[d]" each and every one of the Arizona Attorney General's allegations. Indeed, in the Assurance of Discontinuance, CenturyLink claimed that all terms, materially qualifying conditions, termination fees, availability of high speed internet speeds, modem/router purchase requirements and installation fees were "fully disclosed."

134. Despite the seriousness of the Arizona Attorney General's allegations, CenturyLink resolved the inquiry with a modest \$150,000 payment to cover the Attorney General's fees and costs. CenturyLink claimed that it settled the case solely as a "means of efficiently closing the Attorney General's investigation into this matter" and that the settlement did not represent "any admission of guilt, wrongdoing, violation or sanction." Rather, CenturyLink broadly denied "any violation of state, federal, or local law," that "any actions, inactions or practices of CenturyLink were a consumer fraud or otherwise legally improper," or that "any Arizona Consumers who are residential customers of CenturyLink suffered or incurred any damage or loss for which the law provides recourse."

135. Nevertheless, as part of the Assurance of Discontinuance, which expressly applied to CenturyLink's "officers, directors, managerial [and] supervisory employees,"

CenturyLink also agreed to comply with a number of prospective requirements intended to ensure compliance with the Arizona consumer protection laws, including:

- sending consumers a confirmation of the charges included in their bills after three days of a sale;
- conducting an investigation into any consumer complaints in which a customer alleges being charged for a product or service that was not requested, being charged at a price that was not accurately quoted, or being charged for a modem/router that the customer claimed to have properly and timely returned;
- agreeing that no customer bills would be sent to collections until an investigation was completed and the results were provided to the consumer; and
- confirming with the customer internet speeds before processing a customer's high speed internet order.

136. To investors who were unfamiliar with CenturyLink's actual sales practices, the settlement did not appear to reflect any sanction whatsoever – as CenturyLink should have been following the steps required by the agreement in the first place. Indeed, CenturyLink led investors to believe that none of these requirements represented a change in CenturyLink's practices, and the Company "expressly denie[d] that its policies, practices or procedures that may be inconsistent with those set forth in this Assurance of Discontinuance fail to meet or violate any applicable standard."

137. Due to CenturyLink's strongly worded express denials, and the relatively modest \$150,000 payment, the significance of the Arizona Attorney General's investigative findings was obscured from investors. Indeed, CenturyLink did not disclose the Arizona Attorney General's investigation or its settlement in any SEC filing or other public release, and the settlement was not identified or cited by any other public news or

other source until months later. As a result, the market barely registered this development, and instead continued to be misled by Defendants' false and misleading statements.

138. Unfortunately for investors and consumers, CenturyLink ignored the Assurance of Discontinuance as well. While the settlement required CenturyLink to implement the steps described above, according to former CenturyLink employees, there is no evidence CenturyLink took any of the affirmative measures required by the order when dealing with Arizona consumers, or any other CenturyLink customers. To the contrary, according to FE-9, "It went in the opposite direction. It got even worse."

**G. CenturyLink Distinguishes Its Sales and Marketing Practices as Honest and Legitimate, Criticizing Competitors for Boosting Revenues By "Adding Fees"**

139. Just weeks later, the Company again reported favorable results in its consumer segment, which had been buoyed by the improper sales practices identified by the Arizona Attorney General. But instead of disclosing the impact of its actual sales practices on revenues or addressing the Arizona Attorney General settlement, CenturyLink attributed its success to strategy "adjustments."

140. Specifically, when reporting the Company's first quarter results on May 4, 2016, Defendant Douglas highlighted a change in emphasis to "bundled broadband services" that was purportedly enabling the Company to sign up customers who were "less precluded to churn" and were going to generate a "higher ARPU." Most significantly, Douglas clarified that any difference between CenturyLink's ARPU figures and those of the Company's competitors was the result of its competitors charging unwanted fees—something that Douglas falsely told investors CenturyLink did not do:

So I would tell you that our ARPUs are consistent with what you'd see at an ARPU level in our competitors. And we see competition adding a lot of fees. And so, that's where there might be a little bit of a delta, but we're working through, and constantly monitoring what our competitors are doing in the marketplace, with regard to the average ARPUs in our business.

**H. CenturyLink's Cramming Practices Continue Unabated While the Minnesota Attorney General Issues A Civil Investigative Demand and A Whistleblower Urges Defendant Post to Address the Fraud**

141. Just one week after Defendant Douglas assured investors of the Company's sales practices and ARPUs, on May 12, 2016, the Minnesota Attorney General's Office sent a civil investigative demand to CenturyLink following a growing wave of complaints from Minnesota consumers who had been victimized by the very same deceptive practices as millions of other customers across the country.

142. As would be revealed only after the end of the Class Period, Defendant Post and CenturyLink's senior managers immediately sprung into action after receiving the civil investigative demand. Indeed, CenturyLink's senior management recognized that this new investigation, following on the heels of CenturyLink's settlement with the Arizona Attorney General's inquiry, threatened to expose Defendants' scheme. As discussed further below, after the Class Period, the Minnesota Attorney General disclosed that Defendants engaged in a series of obstructionist tactics to frustrate the investigation.

143. As CenturyLink's senior management was attempting to keep the Minnesota Attorney General at bay, Defendants continued to receive repeated reports, both internally from employees and externally from customers and regulators, concerning the fraudulent practices carried out in the Company's call centers. One such employee, Heidi Heiser, who



worked as customer service and sales agent in Arizona beginning in August 2015, brought those issues directly to the attention of Defendant Post.

144. As she would later allege in a whistleblower lawsuit, like the former CenturyLink employees cited above, Heiser witnessed CenturyLink customers being charged for services that they did not request and that CenturyLink's sales quota and disciplinary systems encouraged this conduct. As Heiser and numerous former employees confirm, this inevitably led to rampant cramming and charging of unauthorized services on customer accounts, which meaningfully contributed to the revenues that CenturyLink reported to investors. According to Heiser:

CenturyLink management had not only created the workplace incentives, sales practices, and lack of oversight that encouraged the fraudulent assignment of unauthorized lines or services, and related charges, to customer accounts, but they were knowingly and intentionally ignoring the customer complaints about such practices and enforcing such policies that allowed CenturyLink to keep payments received on unauthorized charges and to encourage more such payments.

145. At the same time Heiser became increasingly troubled by CenturyLink's fraudulent business practices – which she reported to her direct supervisor (Christine Wells) and as well as two other supervisor-managers (Denise Medina and Michael Del Campo) – a strikingly similar fraudulent scheme at U.S. banking giant Wells Fargo began to make headlines. Specifically, on September 8, 2016, regulators investigating Wells Fargo announced \$185 million in fines for the undisclosed company practice of sales representatives adding accounts without customers' knowledge, triggering extensive media coverage and congressional investigations. According to the CenturyLink whistleblower,

there were “frightening parallels between the Wells Fargo Bank scandal and what she saw happening at CenturyLink.”

146. After none of her complaints led to any discipline or action by CenturyLink management, Heiser brought her concerns to the Company’s CEO. Specifically, in an online Townhall meeting where Company employees had the opportunity to post questions to online message board for review by Defendant Post in October 2016, Heiser posted an online question asking the CEO “why customers were being given multiple accounts and being billed for things they did not ask for” – again alerting CenturyLink’s senior-most management to the cramming practices they had monitored for years.

147. Heiser’s question was removed from the message board shortly after she posted it and just two days later, Heiser was alerted she had been suspended—and later terminated—as retaliation for blowing the whistle. While the Company claimed Heiser was being terminated for hanging up on customers, those disconnections were caused by technical issues that Heiser had for months repeatedly sought help in remedying from her managers, and had never before been raised as a concern. As demonstrated by CenturyLink’s termination of FE-11, who was fired for refusing to “cram” and sell a “full service” package to a 90-year-old customer who only wanted a line with local service and caller ID, CenturyLink’s termination of Heiser for a pre-textual reasons was hardly unique. This was how the Company perpetuated its undisclosed and unlawful billing scheme.

**I. CenturyLink Continues to Falsely Deny and Downplay Reports of Sales Misconduct**

148. As the Company's misconduct continued unabated, and consumer complaints grew to outsized levels, CenturyLink's practices began to attract the attention of local news outlets. In late 2016 and early 2017, complaints over CenturyLink's billing misconduct began to make headlines, particularly in those areas – such as Seattle, Washington, Portland, Oregon, Omaha, Nebraska, Boise, Idaho, Denver, Colorado, and Minneapolis, Minnesota – where CenturyLink had expanded operations and sought to compete with cable providers.

149. For example, a February 1, 2017 report by KGW television in Oregon detailed how a Portland resident was promised a discount on her phone, internet and cable TV but after signing up with CenturyLink, was charged nearly four times that rate and was unable to get CenturyLink to correct her bill. As the resident explained, "I felt like it was back-alley tactics." In responding to the story, CenturyLink issued a statement denying any wrongdoing, falsely claiming that:

CenturyLink strives to provide the best possible service at all times. As a customer-first business, we take any complaint seriously and work diligently to provide each customer with a fair and quick resolution. And where our investigations into complaints show that process changes can improve the customer experience, we make improvements and incorporate them into our employee training and customer outreach.

150. CenturyLink continued to issue statements like these and similar false denials to at least six local news stations from October 2016 through the end of the Class Period, consistently denying any systemic billing problems, claiming that such complaints were the result of an isolated failure to properly "follow routine billing processes," that the

Company promptly investigated and resolved the complaint, and had “put in a new review process for pending offers, installed a new bill estimation tool and the company is simplifying promotional offers.” These statements were materially false and misleading because, as Defendants knew, customer complaints were not “taken seriously.” Instead, CenturyLink arbitrarily limited refunds by placing limits on customer “credits” and customer complaints were in fact treated as additional sales opportunities. Nor was CenturyLink a “customer first” business and the improper and inaccurate bills were not isolated—they were a core part of CenturyLink’s business model.

151. At the same time – despite having implemented CenturyLink’s cramming scheme, and separately having been informed about it in myriad ways, including through monthly reporting, communications in connection with investigations by at least two state Attorneys General, and directly by Heiser – Defendants continued to represent that the Company was focused on customers and engaged in ethical sales practices. During the Company’s February 8, 2017 earnings call, Defendant Post claimed that CenturyLink had worked hard to “improve the customer experience and make sure that we’re more competitive in the marketplace in certain areas,” reassuring investors that “we approach our responsibilities each day with a customer-centric mindset.” And days later, on February 23, 2017, the Company again touted its Code of Conduct in its Form 10-K for the fiscal year 2016 – which, as before, assured investors that the Company would be “truthful and demonstrate integrity in all our dealings,” would “truthfully market, promote, advertise and sell our products” and would not “engage in unethical or deceptive sales practices,”

including “plac[ing] or record[ing] an order for our products and services for a customer without that customer’s authorization.”

**V. THE TRUTH REGARDING CENTURYLINK’S BOILER ROOM PRACTICES IS REVEALED IN A SERIES OF CORRECTIVE DISCLOSURES**

**A. A Whistleblower Exposes CenturyLink’s Wells Fargo-Like Scheme**

152. On Friday June 16, 2017, the truth concerning CenturyLink’s billing practices and their impact on the Company’s financial condition began to be revealed. On that day, *Bloomberg* published an article entitled “CenturyLink Is Accused of Running a Wells Fargo-Like Scheme,” which reported that Heidi Heiser, the former CenturyLink customer service and sales agent who alleged that she had been fired after publicly raising the issue of the Company’s cramming business model to Defendant Post, had filed a whistleblower complaint against the Company. As the article explained, Heiser’s complaint revealed that the Company had engaged in a practice of charging customers for services they neither authorized nor requested. The article further explained that, according to Heiser’s complaint, to deal with customers complaining about having charges crammed onto their bills, CenturyLink customer service personnel were “directed ‘to inform the complaining customer that CenturyLink’s system indicated that the customer had approved the service,’ . . . and as a result ‘it was really the customer’s word against CenturyLink.’”

153. The article also explained that Heiser was fired two days after directly informing Defendant Post of these practices at an internal, Company-wide question-and-answer session. In addition, the article connected the revelations to the recently-uncovered fraud at Wells Fargo, noting that “[t]he complaint likens what Heiser said CenturyLink

sales agents did to the Wells Fargo scandal and estimated the alleged unauthorized fees amounted to ‘many millions’ of dollars.”

154. This disclosure partially corrected Defendants’ prior materially misleading statements and omissions concerning CenturyLink’s purportedly “customer first” sales practices, and also revealed that the Company’s revenues had been inflated by cramming. Market reaction to the news was swift. As a result of these revelations, the Company’s stock declined significantly, falling \$1.23 per share – nearly 5% – on heavy volume, from the previous day’s close of \$26.95 to close at \$25.72 on June 16, 2017.

155. Analysts immediately reacted and reassessed their views of CenturyLink stock based on these revelations, and connected the share price decline to the disclosures of the Company’s misconduct contained in Heiser’s lawsuit. For example, in a June 16, 2017 report, a CFRA analyst downgraded his rating on CenturyLink stock in direct reaction to these revelations, citing “increased risks” after reports of “a lawsuit filed by a former employee, accusing CTL of running a Wells Fargo like scheme.”

156. Analysts and market observers also recognized that the revelations in the Heiser lawsuit had wide-ranging impact on the Company’s business. For example, on June 16, 2017, technology and communications publication *CRN* cited an industry professional whose company worked with CenturyLink who expressed shock at the practices revealed in the lawsuit. As reported in the article, this CenturyLink business partner “told *CRN* that he thought ‘slamming,’ or the illegal practice of switching a consumer’s telephone service without authorization, was a thing of the past.” The article further explained that these practices would likely impact future business, as CenturyLink’s customers would raise

questions about the Company's practices. Similarly, in a June 19, 2017 note, Morgan Stanley reported that the share price decline was triggered by "[n]ews that CenturyLink was facing a lawsuit alleging that the company overcharged customers in Arizona by adding additional services," stressing that additional information concerning the "scope of the alleged activity" and the "degree to which this appears to be an isolated incident, or something with broader geographic and financial scope" would further impact their view of the Company's stock.

157. Defendants immediately scrambled to minimize the impact of the revelations in the *Bloomberg* article. In articles published on June 16, 2017 in technology and communications publications *Ars Technica* and *CRN*, CenturyLink claimed that the conduct alleged in Heiser's complaint was "completely inconsistent with our company policies, culture, and Unifying Principles, which include honesty and integrity," and pleaded ignorance on the part of the Company's senior executives, stating that "our leadership team was not aware of this matter until the lawsuit was filed."

158. The next trading day, however, news worsened for CenturyLink investors. On Monday, June 19, 2017, at 9:30 a.m., *Bloomberg* reported that a consumer class action lawsuit arising out of CenturyLink's billing misconduct had been filed in California the night before. The article explained that the lawsuit detailed how "Ms. Heiser's allegations of what she observed, and what CenturyLink corporate culture encouraged" were "consistent with the experiences of hundreds of thousands and potentially millions of consumers who have been defrauded by CenturyLink." The article noted that the "damages to consumers could range between \$600 million and \$12 billion, based

on CenturyLink's 5.9 million subscribers." Shortly thereafter, numerous consumer class action lawsuits were filed in courts across the country.

159. This disclosure further partially corrected Defendants' prior materially misleading statements and omissions concerning CenturyLink's sales practices, and also further revealed the scope of misconduct at CenturyLink and the degree to which the Company's revenues had been materially inflated by cramming.

160. The market again reacted quickly. CenturyLink's shares dropped significantly by a further \$0.36, or 1.4%, to close at \$25.36. The price of CenturyLink's 7.60% Senior Notes similarly declined significantly, dropping nearly 6% from a June 16, 2017 closing price of \$984.30 to close at \$926.05 on June 19, 2017.

161. Analysts continued to report on the revelations contained in the consumer lawsuits that were filed across the country. For example, on June 26, 2017, an analyst from Barclays issued a report explaining the risks to CenturyLink in light of the revelations in the complaints filed in the weeks before and the Company's subsequent nearly 10% drop in share price, and noted that these disclosures "could serve as an overhang for the shares for some time."

162. Significantly, on June 22, 2017, the Company disclosed that Defendant Douglas – who had been the senior-most executive responsible for consumer sales and was just appointed by Defendant Post in April 2017 to serve as a member of the combined Company's senior leadership team – would be leaving the Company as soon as the merger closed. In doing so, Douglas forfeited more than \$3 million in compensation in the form of time-based and performance-based restricted shares that had been granted him in



February 2017 – a pay package that the Company confirmed in a Form 8-K filed on June 1, 2017, just three weeks prior to the abrupt leadership change.

**B. The Minnesota Attorney General Details CenturyLink’s Fraudulent Sales Practices**

163. Investors soon learned far more about the scope of CenturyLink’s billing fraud. On July 12, 2017, the last day of the Class Period, news reports disclosed that the Minnesota Attorney General filed suit against CenturyLink in Minnesota state court following a year-long investigation that cited internal Company documents, emails, and call recordings revealing extensive detail as to how the Company fraudulently charged Minnesota consumers in violation of Minnesota’s consumer protection laws.

164. The Minnesota Attorney General’s complaint provided significant and newly disclosed detail concerning the means by which the Company cheated customers. Specifically, citing internal Company documents and non-public correspondence obtained through the Minnesota Attorney General’s year-long investigation, the complaint detailed how CenturyLink’s complex pricing systems, exception-laden promotional strategies, and myriad fees contributed to CenturyLink sales representatives systematically misquoting and misrepresenting prices to customers that the Company refused to honor. The complaint cited 35 specific examples of customers who were defrauded, and provided significant detail as to how the Company’s billing scheme was carried out. For example, the complaint cited an April 2015 email from a Company employee stating that she got “so many” complaints per day and that:

maybe 1 out of 5 [customers] are quoted correctly or close enough. I have one today quoted \$39 and its [actually] over \$100 monthly. So I tend to get

on the defensive for the customer at times because of the large amount that are misquoted. As in many cases, the customer calls in for several months and promised call backs, passed around, or cut off before going to the AG, PUC, FCC or BBB . . . .

165. In a May 2015 conversation recorded by CenturyLink that was obtained and cited by the Minnesota Attorney General, another Company employee stated that “there are not enough people to do the work” of responding to the complaints, and that there was a “whole pile of Minnesota [complaints] to go through...they usually come in groups of 10.”

166. The lawsuit also revealed that the Company had systematically refused to honor the prices it quoted customers, and internally documented this fraudulent practice. Citing internal recordings and reviews of internal Company documents, the complaint detailed how CenturyLink refused to correct customers’ improper and fraudulent bills. For example:

- A sales representative told a customer that “no one can get you that price” even though the Company’s complaint file states that CenturyLink listened to a recording of the phone call and internally confirmed the “misquote” by the sales representative;
- A CenturyLink representative admitted to a customer that “you were misquoted,” but that “I can’t give it [the quoted price] to you, no one can”;
- A CenturyLink representative told a customer that its offers are “not binding”;
- Another CenturyLink representative told a customer that the discounts that it had offered need not be honored because they are “a gift from us to you”;
- After a CenturyLink customer called to complain that her bill had increased more than 50% the month after CenturyLink promised to

change her rate, and cited the confirmation number she was given, the representative told her that CenturyLink can “give you all the confirmation numbers in the world” but that if CenturyLink “quotes you [a rate] not available it’s going to get denied.”

167. The details provided in the Minnesota Attorney General’s complaint also further revealed the financial impact of the Company’s fraudulent practices. For example, in the 35 examples cited in the complaint, the fraudulent pricing added from \$10 to over \$100 increases in monthly charges, in many cases more than doubling customers’ bills. In a press conference held the same day the suit was filed, General Swanson said that, while unsure of the precise number of Minnesota customers impacted or the amount of restitution that would be required, she expected the numbers to be “very, very significant.”

168. The Minnesota Attorney General’s complaint and General Swanson’s press conference announcing the lawsuit were covered extensively in the press. For example, a July 12, 2017 *Bloomberg* article reporting on the lawsuit revealed that the Minnesota Attorney General had been investigating CenturyLink for over a year. The article explained that, contrary to CenturyLink’s claims that it had cooperated in the investigation, the Company had in fact frustrated the Attorney General’s inquiry by falsely claiming that certain customer call recordings did not exist. In fact, General Swanson obtained them immediately as soon as her office subpoenaed a third-party CenturyLink vendor that had custody of the calls. The report also explained that the Company had also refused to provide basic pricing information, claiming doing so was “unduly burdensome.” Similarly, the Minnesota Star Tribune confirmed CenturyLink attempted to conceal its unlawful practices, reporting that General Swanson said that CenturyLink was “lackluster” in

responding to the State's investigation. According to General Swanson, in the course of the investigation, "[t]he company was contacted hundreds of times," and that "[t]his issue has been going on for a long, long time. We felt the need for judicial intervention."

169. Analysts reacted sharply to the news. The same day, Morningstar published an analyst report in which it reported on the Minnesota Attorney General and consumer lawsuits. Morningstar analysts noted complaints of "similar overbilling practices in a number of other states, such as Oregon, Colorado, and Arizona," and explained that "it is likely that other states will follow suit in bringing legal actions against CenturyLink." On the sole basis of the revelations in the Minnesota Attorney General's complaint and the assessment that the problem was widespread, Morningstar's slashed its fair value estimate for CenturyLink stock by over 6%.

170. These disclosures further corrected Defendants' prior materially misleading statements and omissions concerning CenturyLink's sales practices. These disclosures also revealed that the Company's institutionalized cramming model went beyond adding unrequested services to customers' accounts and also included charging and misrepresenting fees, and systematically refusing to honor the prices offered to customers. Last, these revelations informed investors that the Company and its senior executives had knowledge of the extensive problems with CenturyLink's sales practices but concealed them from the state regulators.

171. Once again, the market reacted severely to these revelations, with CenturyLink stock declining in a statistically significant manner, falling by \$0.75 per share,

or 3.23%, on extraordinarily high volume, to close at \$22.50 on July 12, 2017, causing investors substantial losses.

## **VI. POST-CLASS PERIOD EVENTS**

172. On its second quarter August 2, 2017 earnings call, CenturyLink disclosed that it had formed a special committee to investigate the Company's consumer billing practices—but Defendant Post refused to answer any questions about the investigation, the Company's billing practices, or their impact on the Company, stating that “we cannot speak for the work [of the committee] before it's complete.”

173. On October 23, 2017, CenturyLink entered into a stipulated consent order with the Minnesota Attorney General in which it agreed to dramatically reform its sales practices in Minnesota. Specifically, CenturyLink agreed to “in a clear and conspicuous manner disclose to Minnesota consumers at the time of sale” significantly more information than the Company had throughout the Class Period, including the monthly base prices of services, an itemization of fees, the time period during which quoted prices applied, information about whether CenturyLink guaranteed the fees, and any restrictions or conditions on a customer's ability to receive the quoted prices. The consent order also prohibited CenturyLink from charging Minnesota consumers amounts greater than those that had been disclosed, to refuse to honor quoted prices on the basis of undisclosed conditions or restrictions, and required the Company to “implement processes and procedures, and provide sufficient training designed to ensure” that the Company made adequate disclosures to consumers. That CenturyLink was required to stipulate to providing such basic information and assurances confirmed that the Company's

representations about its customer service and sales practices throughout the Class Period were materially false and misleading, as they did not include even basic measures to ensure customers were quoted the correct price or that customer complaints were properly investigated and handled.

174. On December 7, 2017, the Company announced the results of the Special Committee's investigation into the Company's sales and billing practices. Although CenturyLink claimed that this investigation "did not reveal evidence to conclude that any member of the Company's management team engaged in fraud or wrongdoing" – despite the overwhelming evidence cited above confirming the contrary – the Company admitted several key findings demonstrating that its Class Period statements were materially false and misleading when made. These findings included that:

- "[s]ome of the Company's products, pricing and promotions were complex and caused confusion, and the resulting bills sometimes failed to meet customer expectations";
- "limitations in the Company's ordering and billing software made it difficult to provide customers with estimates of their bills and confirmation of service letters that reflected all discounts, prorated charges, taxes and fees";
- "[s]ystems and human errors led to certain customers not receiving an offered point-of-sale discount"; and
- "[t]he Company did not fully address this issue in a timely manner for some customers."

175. These admissions confirmed several key allegations in the whistleblower complaint and, as news media reports were quick to point out, they contradicted the Company's claims of management's innocence. For example, on December 13, 2017, the

telecommunications webzine *Techdirt* published an article titled “After Investigating Itself, CenturyLink Proclaims There’s Just No Way It Committed Billing Fraud,” mocking the committee for finding “precisely what CenturyLink CEO Glen Post hoped they would.” As the report noted, the Special Committee’s findings were in “stark contrast to what whistleblowers and numerous state investigations have so far discovered.” To date, CenturyLink has refused to produce any documents or information underlying the committee’s investigation to the Minnesota Attorney General or the plaintiffs in the consumer class actions, broadly claiming those materials are subject to work product and attorney-client privileges.

176. On December 18, 2017, Defendant Post conceded that the reduction of CenturyLink’s operating cash flows – which had been curtailed by the Company’s inability to continue generating revenues through cramming – to the decline in CenturyLink’s share price. Specifically, in an internal Company email sent one week before Christmas, Defendant Post told employees that, “[b]ecause of the reductions we have experienced in operating cash flow, I have decided it is best that we not pay the holiday bonus that we have previously paid for many years at CenturyLink.” In that email, Post said that “we must make progress in stabilizing and growing our cash flows,” noting that “this cash flow issue has contributed to the decline in our stock price we have seen over this past year.” Several weeks later, on January 11, 2018, Defendant Post sent an internal memo announcing a pay freeze for 2018, again citing the Company’s lowered stock price. At the same time, Defendant Post earned more than \$14 million in compensation in 2017, and over \$50 million during the Class Period.

177. On March 6, 2018, Defendant Post – who had previously announced his intention to stay on with the Company as CEO until January 1, 2019 – unexpectedly announced that he would retire in May 2018, immediately following the Company’s annual shareholder meeting. Post resigned from the Company on May 23, 2018. Post had served as CenturyLink’s CEO for more than 26 years and been with the company for 42 years.

178. Numerous investigations by state attorneys general and other regulatory authorities into CenturyLink’s fraudulent billing practices remain pending, and discovery in those actions has only further confirmed the extent of Defendants’ fraud. For example, on March 14, 2018, the Minnesota Attorney General filed a letter brief revealing that discovery in its case revealed “that CenturyLink charged over 12,000 Minnesota consumers more than CenturyLink promised” and that information produced in another state investigation showed that “CenturyLink over-billed more than 175,000 customers in that state.” Moreover, according to the Minnesota Attorney General, discovery in that case disclosed that an internal “nation-wide audit” conducted by CenturyLink showed “various billing problems, including that CenturyLink potentially over-billed more than 3.5 million customers in various states”—amounting to over half of CenturyLink’s 5.9 million broadband subscribers. These facts confirm the systemic nature of CenturyLink’s billing misconduct, and that such a companywide, institutional practice could not have escaped the attention of CenturyLink’s senior management but could have only been carried out with the explicit approval or reckless disregard of the Executive Defendants.



## VII. SCIENTER

179. Numerous facts, considered collectively, demonstrate that CenturyLink and the Executive Defendants knew that they were misrepresenting the Company's sales practices, the bases for the consumer segment's reported revenues, and the sustainability of those revenues or, at a minimum, acted with severe recklessness.

180. First, as noted above, Defendants were directly informed of sales misconduct occurring at a massive scale throughout the Company, which directly demonstrates scienter. For example, in April 2014, FE-5 directly informed Defendant Bailey of the cramming issues s/he encountered, and Defendant Bailey acknowledged that cramming was occurring and stated that "We've got to do something about our call centers." Shortly thereafter, Defendant Post sent a Company-wide email stating that the Company was creating a position for Bailey concerning business ethics and how the Company deals with customers. At around the same time, the Company implemented a dramatic reform of how it assessed sales personnel in an effort to address the cramming crisis at the Company. This change was accompanied by a companywide communication blast, and Kathy Flynn was recognized by Defendant Post for her work on the project. However, after the Company's sales numbers took a downturn shortly after the change, the Company's senior management reverted back to the old metrics system immediately. Because, as CenturyLink has admitted, all sales and billing policies were made by managers at CenturyLink's headquarters, these significant companywide changes could only have occurred with the knowledge and/or specific approval of the Executive Defendants.

181. The Executive Defendants were also made aware of the investigations initiated by the Arizona and Minnesota state Attorneys General, and their findings were communicated to the Executive Defendants. Indeed, after the end of the Class Period, Defendant Post attempted to take credit for personally responding to the Minnesota Attorney General's investigation. In a July 23, 2017 internal email to Company employees, Post claimed that "we have been fully cooperating with the AG's office since the inquiry began" in May 2016, and "we had several phone meetings with the AG's office about the information provided and were never told they thought we were being uncooperative." Moreover, customers reported instances of improper billing directly to the Executive Defendants, including Defendants Post and Puckett, who tracked the Company's investigation into and response to those complaints. As FE-19 reported, typically, Defendant Post complained that the Company offered too much compensation to resolve customer billing complaints. Last, when a whistleblower, Heiser, raised concerns about rampant sales misconduct directly with Defendant Post in October 2016 in a companywide forum, she was promptly terminated.

182. Second, the Executive Defendants received regular routine reporting that directly informed them of the extent and nature of the widespread billing practices at the Company's call centers. Numerous employees, including FE-16, FE-18, and FE-19, confirmed that the Executive Defendants – including Defendants Post, Ewing, and Puckett – received monthly reports by email that provided data on customer complaints about customer billing, including from state regulators, the FCC, and the BBB, and that these reports specifically identified "cramming." As FE-16 explained, the "complaint that

always stood out was misrepresenting prices,” because the Company “always had those issues.” Indeed, as a former CenturyLink employee explained, the Company’s “coaching” systems included an option in its drop-down menu for “cramming,” demonstrating just how institutionalized these practices were. The Company’s cramming practices were also recorded in the Company’s Q-FINITY reporting system, documented in reports to supervisors and managers, tracked in monthly sales worksheets, reflected in HR investigations, exit surveys, and disciplinary and termination proceeding materials, and discussed in monthly meetings by senior management. For these reasons, it would be implausible for Defendants to claim they were unaware they were occurring.

183. Third, the Company’s billing scheme was implemented by the Executive Defendants, who dictated the revenue projections and sales targets the Company’s sales force was required to meet. Not only did the Executive Defendants set the Company’s revenue targets, senior management closely monitored and enforced the sales quotas required to meet them. The Executive Defendants had access to “real time” sales and revenue data through the Company’s dashboard system, and could track the revenues and sales at the employee-level. In fact, as described by FE-8, Olsen, an HR Business Partner, and the relevant directors and managers of each call center would hold monthly meetings to review sales employee performance and tracking of quotas, and discuss the discipline for employees who missed targets. Despite regular reporting and evidence that sales quotas were simply unobtainable, CenturyLink’s managers refused to adjust them. As FE-8 explained, sales targets went unchanged even when over half of all employees failed to meet them for a significant portion of the Class Period, while and FE-1 reported that

between 70% to 80% of all sales employees were under some sort of corrective action for missing quotas at any given time. The same managers charged with setting and monitoring quotas—including Olsen—were informed of the fraudulent practices and customer complaints that enforcement of these quotas encouraged. Indeed, CenturyLink managers even trained sales employees to engage in cramming by instructing them to quote a sine price to customers without breaking out optional service fees. These facts raise a strong inference that Defendants knew that cramming was a significant problem at the Company when they made their misrepresentations.

184. Fourth, Defendants paid careful attention to the drivers of the Company's revenues and made regular representations to the market about them—and can therefore not plausibly deny knowledge of a practice that impacted up to half of all CenturyLink customers. On numerous conference calls, Defendants discussed whether (and to what degree) various strategies affected the Company's results and reported on, for example, specific details concerning the efficacy of CenturyLink's "bundling" strategy, the amount of CenturyLink's ARPU compared to its competitors, and the credit profiles of CenturyLink customers. As Defendant Douglas admitted, CenturyLink executives were "constantly monitoring what our competitors are doing in the marketplace," and thus also obviously knew what the Company itself was doing. Given that the Executive Defendants paid close attention to the drivers of the Company's and its competitors' revenues, there is a strong inference that they were aware of a key driver – rampant sales misconduct – that, according to an internal CenturyLink audit, may have impacted between a third and a half of all CenturyLink customers.

185. Fifth, the Company repeatedly represented to numerous constituencies and public regulators not to engage in fraudulent sales practices, and affirmatively denied that it engaged in sales misconduct alleged herein. Throughout the Class Period, Defendant Cole and the Company certified compliance and entered into numerous agreements with public utilities which required the Company to explicitly agree to avoid engaging in the very misconduct alleged herein. Moreover, in entering into an Assurance of Discontinuance with the Arizona Attorney General, the Company explicitly agreed to refrain from the same conduct that would be revealed as Company practice by Heiser's and the Minnesota Attorney General's complaints. Indeed, in the Arizona Assurance of Discontinuance, which expressly applied to CenturyLink's "officers, directors, managerial [and] supervisory employees," the Company "expressly deni[ed]" allegations that it engaged in billing misconduct. And, in responding to media inquiries detailing customer complaints, the Company asserted that any identified problems were in conflict with Company policy or were the result of other, innocuous causes. These false denials were part of the senior leadership's overriding culture in dealing with investigation into and criticism of its sales practices. As FE-19 reported, no matter the facts, CenturyLink's executive leadership would rather "pay the fines" than "kowtow" to a state Attorney General and actually reform the Company's practices. These facts further confirm that Defendants either knew their statements were false, or were reckless in making them.

186. Sixth, sales misconduct was so widespread and material at the Company that Defendants had to have known about it. Cramming resulted in overbilling of up to 3.5 million customers, representing between one-third and one-half (or more) of the

Company's subscribers. Heiser characterized the scandal at CenturyLink as "Wells Fargo-like," but the scale of misconduct at CenturyLink was far more pervasive than at Wells Fargo. Wells Fargo has said that the number of unauthorized or fraudulent accounts at issue there represented approximately 2% of all such accounts at Wells Fargo. At CenturyLink, between a third and a half of all subscribers may have been overbilled. Moreover, as detailed above in ¶93, the amounts of fraudulent charges at CenturyLink amounted to hundreds of dollars per customer are far greater than the total amount of fraudulent accounts at Wells Fargo, which totaled approximately \$2.5 million. Given the pervasive nature of the alleged misconduct, Defendants cannot plausibly claim they were ignorant of it during the Class Period.

187. Seventh, the SEC specifically asked the Company to provide more detailed information about its reported revenues and marketing and sales efforts of its consumer segment, further underscoring the importance of the Company's disclosures about its actual sales practices. In fact, the SEC was questioning the Company's disclosures about these practices at the same time the Company had undertaken significant efforts to address illegal cramming at the Company—but then aborted those efforts after they led to a decline in sales. The fact that the Company's primary securities regulator sought additional disclosure concerning the reasons for the performance of the Company's consumer segment – and the fact the Company and Defendant Cole refused to provide such disclosure – also raises a strong inference that Defendants knew or were reckless in not knowing about the fraud.

188. Finally, several members of CenturyLink’s senior leadership departed under suspicious circumstances. On February 11, 2015, Defendant Puckett, who had previously served as CenturyLink’s COO for 5 years, was elevated to a position leading CenturyLink’s global head of sales and revenue. Less than four months later, however, she was summarily terminated, and forfeited equity awards that would later be valued at over \$2 million. In similar circumstances, on April 28, 2017, CenturyLink announced that Defendant Douglas, Puckett’s successor, would be a member of the senior leadership team reporting to Defendant Post after the Level 3 merger closed. Less than two months later, after investors began to learn the truth about the Company’s widespread sales misconduct, CenturyLink announced that Douglas would be leaving the Company. In so doing, Douglas forfeited more than \$2 million in compensation. It is implausible that these executives left voluntarily, forfeiting millions of dollars in compensation, shortly after being promoted. The termination of Defendants Puckett and Douglas – the senior-most executives with direct responsibility for consumer segment sales – adds to the inference of scienter.

189. Similarly, Joseph Zimmer, the former director and audit committee member, was ousted from the Board under suspicious circumstances. Investors only learned about the background concerning his removal because Zimmer forced the Company to disclose it. Zimmer was forced off of the Board just weeks after the Company responded to the SEC’s inquiry questioning the bases for the consumer segment’s operating performance. And Zimmer himself said his forced departure, and the Board’s handling of the matter, “raised serious governance, transparency and honesty issues” and that the Company attempted to portray those events to the investing public in an “incomplete[,] inaccurate[,]”

and “deliberately misleading” way. The unusual circumstances of Zimmer’s ouster, as well as his role on the Company’s audit committee, the timing of significant companywide employee performance changes and their corresponding revenue impact, adds to the inference of scienter.

### **VIII. DEFENDANTS’ FALSE AND MISLEADING STATEMENTS**

190. Throughout the Class Period, Defendants made numerous materially false and misleading statements and omissions, including those concerning: (1) the nature of the Company’s “customer first” business strategy and, particularly, CenturyLink’s purported strategy of providing products and services according to customers’ “needs” and its purported practice of “bundling” its products and services; (2) the reasons and factors driving the Company’s financial performance, including the drivers of the revenues it reported from consumers and small business customers, the impact of the Company’s “bundling” marketing strategy, and the quality and demand for the Company’s services; (3) the reasons behind CenturyLink’s fluctuating financial results, which had been secretly impacted by the Company’s quickly-aborted effort to address its deceptive sales practices cramming crisis; (4) CenturyLink’s business conduct, particularly as it related to sales practices, business integrity, and ethical standards, as well as the Company’s statements minimizing, and denying the Company’s fraudulent billing practices in response to news reports that began to highlight them; and (5) CenturyLink’s material omissions under Item 303.



**A. Materially False And Misleading Statements And Omissions Concerning CenturyLink's Business Strategies and Financial Performance**

191. Throughout the Class Period, Defendants misled investors concerning the reasons for the Company's financial performance and the business strategies the Company purportedly used to drive subscriber and revenue growth. Specifically, the Company claimed the Company adhered to a "customer first" marketing approach and enhanced revenues and "customer loyalty" through its service "bundling" strategy. Defendants also falsely attributed revenue growth and performance to the Company's strategy of implementing price increases, focusing on retention and higher ARPU customers, as well as its purported transparent billing and CenturyLink's purported practice of not charging the "additional fees" its competitors did.

192. These statements were materially false and misleading. In reality, the Company did not place customers first or provide services based on customers' "needs," but "only cared about profits" and routinely charged customers for services they did not need and did not authorize. Further, the Company did not grow revenues through a "bundling" strategy, by imposing selective price increases, focusing on higher ARPU customers, or by providing transparent billing and avoiding the "additional fees" its competitors charged. In fact, the opposite was true: the Company routinely added services and charged customers' accounts without their approval and refused to honor the prices customers had been quoted. These practices were so ubiquitous that imposing "additional fees" for unauthorized services and other fraudulent sales practices were a material undisclosed contributor to the Company's reported revenues.

**1. False and Misleading Statements Concerning CenturyLink's Purported Focus on Customer "Needs"**

193. Throughout the Class Period, Defendants repeatedly emphasized CenturyLink's purported strategy of selling services and growing subscribers by focusing on providing services that met its customers' "needs," and how this focus helped the Company to effectively compete with cable companies that were often able to offer cheaper prices for similar services. For example, on June 24, 2015, Defendant Post and CenturyLink CTO Aamir Hussain presented at the CenturyLink Inc. Financial Analyst Day. During the presentation, Post stated that CenturyLink was:

[F]ocus[ed] on our customers, their needs, the customer experience in all that we do. It really is about the customer. As we transform this Company, because it has to come from the customer, not what we think is best. What does the customer need to really -- for us to create value for that customer, bring them what they need, how they need their services, their communication services or IT services?

\* \* \*

[W]e have talked about our focus on the customer today. And I know maybe that sounds a little trite. But so many customers -- so many companies fail to really focus on the customer. And it is about creating value for that customer in a way and the customer experience being something they can walk away with really makes him want to do business with CenturyLink in this case, very important.

Confirming the Company's purported strategy of focusing on CenturyLink's customers' needs, Hussain stated that CenturyLink had "a team focused on that and their job is day-in/day-out just rationalize all the product sets that [the Company has] out there, make the network and products simple and easy to use for [its] customers." Hussain stressed that "[w]e underline all that with a world-class project management and metrics team and their

job is to ... [d]eliver a solution that gets to the customer when they need, what they need and where they need it. That is key for us.”

194. Defendants made similar statements in the Company SEC filings during the Class Period, on earnings calls, and during other public presentations. For example, on March 1, 2013, the first day of the Class Period, CenturyLink filed its Form 10-K annual report for fiscal year 2012 (the “2012 Annual Report”) with the SEC. In its 2012 Annual Report, CenturyLink stated that it “rel[ied] on [its] call center personnel to promote sales of services that meet the needs of our customers.” According to CenturyLink, its “approach” to its “residential customers emphasizes customer-oriented sales, marketing and service with a local presence.” CenturyLink stated that it “market[ed] [its] products and services primarily through direct sales representatives, inbound call centers, local retail stores, telemarketing and third parties.”

195. CenturyLink repeated these statements throughout the Class Period, including in its annual reports filed on Form 10-K for fiscal year 2013 (the “2013 Annual Report”), filed on February 27, 2014; fiscal year 2014 (the “2014 Annual Report”), filed on February 24, 2015; fiscal year 2015 (the “2015 Annual Report”), filed on February 25, 2016; and fiscal year 2016 (the “2016 Annual Report”), filed on February 23, 2017. Each of these reports were signed by Defendants Post, Ewing and Cole.

196. In its 2015 and 2016 Annual Reports, CenturyLink represented that its “sales and marketing strategy [was] to enhance [its] sales by offering solutions tailored to the needs of [its] various customers and promoting our brands,” and that its “offerings include

both stand-alone services and bundled services designed to meet the needs of different customer segments.”

197. CenturyLink also represented that its business strategy for specific services was based on the Company “meeting customer care needs.” For example, referring to its consumer segment and “strategic services”—such as the Company’s broadband and television services—CenturyLink’s 2012 Annual Report represented that the Company’s strategy for maintaining and increasing its customers was “based on pricing, packaging of services and features, quality of service and meeting customer care needs.” The Company repeated this same statement in its 2013, 2014, 2015, and 2016 Annual Reports. Similarly, during investor conference calls on March 9, 2015, June 4, 2015 and March 7, 2016, Defendant Ewing stated “[w]e’re committed to being the broadband leader in our markets, offering advanced broadband services that meet the needs of our customers.”

198. With respect to CenturyLink’s “legacy services”—*i.e.*, the “traditional” voice, data and long distance phone services that were threatened by a structural shift to wireless and other newer technologies—the Company represented in its 2012 Annual Report that its “strategy to reduce access line loss” was “based primarily on [its] pricing, packaging of services and features, quality of service and meeting customer care needs.” CenturyLink made nearly identical representations concerning its strategy to “reduce” or “manage access line loss” and legacy services revenues in its 2013, 2014, 2015, and 2016 Annual Reports.

199. Defendants specifically highlighted the Company’s focus on “customer needs” as responsible for CenturyLink’s results. For example, during CenturyLink’s 2014

second quarter conference call on August 6, 2014, Defendant Post attributed the “significant improvement” and impressive \$4.11 billion quarterly “core” revenues, which represented “a significant improvement from the 2% and 3% declines in year-over-year core revenues in the first-quarter 2013 and 2012, respectively,” as “reflecting the commitment and dedication of our employees to meet the needs of our customers.”

200. The statements set forth above in ¶¶193-199 were materially false and misleading and omitted material facts because, as described in Section IV, rather than offer “solutions tailored to the needs” of customers or pursuing strategies based on customers’ “purchasing needs,” CenturyLink disregarded and undermined its customers’ “needs.” Despite the fact that CenturyLink’s customers were entitled to and expected transparent, accurate, and fair quotes and bills, CenturyLink engaged in systematic cramming in which the Company routinely misquoted prices and omitted the prices of optional services when selling to customers. Moreover, the Company fraudulently added services to customers’ bills that those customers did not request or authorize—let alone need. Rather than pursue strategies or solutions focused on customer “needs,” CenturyLink disregarded its customers’ “needs” by repeatedly refusing to honor prices that customers had been quoted.

## **2. False And Misleading Statements Concerning CenturyLink’s Reported Revenues**

201. Throughout the Class Period, Defendants told investors that the Company had taken a number of measures to achieve “revenue stability” – the point at which increased revenues from lower margin “strategic” services would offset slowing revenue declines from high-margin “legacy services” – and eventually return the Company to

profitability. Indeed, this was analysts' central concern during the Class Period, and a topic of discussion in virtually every public presentation CenturyLink gave. For this reason, investors and analysts were highly attuned to the Company's revenue performance.

202. During every earnings announcement during the Class Period, Defendants told investors that the Company was achieving consistent "progress" toward CenturyLink's publicly-described goal of reaching "revenue stability" through key business strategies, including the Company's "bundling" strategy and pricing and discount initiatives, and the quality of and demand for specific CenturyLink products and services that Defendants claimed were responsible for revenue performance. The false and misleading statements concerning the Company's reported revenues, and the representations describing the reasons driving them and the Company's financial performance, are set forth in the chart attached hereto as Appendix A.

203. The statements in Appendix A were materially false and misleading because they omitted the material fact that the Company's revenue and financial performance was due, at least in part, to the undisclosed illegal cramming practices alleged herein. Specifically, these representations created the false impression that the Company's financial performance resulted from the pursuit of legitimate business strategies and the purported demand for CenturyLink's services – and that therefore "revenue stability" was achievable in the near term – when, in reality, the Company's results depended upon and were materially impacted by the Company's undisclosed cramming practices.

204. Further, the Company's statements attributing revenue performance to purportedly legitimate factors concealed the highly material risks and consequences that

the Company's illegal activities invited. In reality, the Company's undisclosed practices were fundamentally unsustainable because they were inflated through fraud, and exposed the Company to the highly probable outcome that these revenues would disappear when CenturyLink's misconduct was uncovered. Indeed, that is exactly what happened.

### 3. False And Misleading Statements Concerning CenturyLink's Service "Bundling" Strategies

205. Defendants represented that one of the most important marketing strategies the Company pursued to grow consumer revenues involved "bundling"—selling numerous services to a single customer—which the Company said led to greater customer loyalty, helped mitigate "legacy" revenue declines, increased service usage, and enabled the Company to effectively compete. For example, in its SEC filings during the Class Period, the Company represented that CenturyLink's "bundling" strategy:

- Presented significant "value" to customers: "We offer our customers the ability to bundle together several products and services. We believe our customers value the convenience and price discounts associated with receiving multiple services through a single company."<sup>6</sup>
- Helped "maintain customer relationships": "We strive to maintain our customer relationships by, among other things, bundling our service offerings to provide our customers with a complete offering of integrated communications services." Similarly, CenturyLink stated that its "sales and marketing" "strategy [was] to enhance [its] communications services by offering a comprehensive bundle of services...to further enhance customer loyalty."<sup>7</sup>

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<sup>6</sup> 2012 Annual Report, 2013 Annual Report, 2014 Annual Report, 2015 Annual Report, 2016 Annual Report.

<sup>7</sup> 2012 Annual Report, 2013 Annual Report, 2014 Annual Report.

- Positively impacted customer “retention”: “While bundle price discounts have resulted in lower average revenues for our individual services,” the Company “believe[d] service bundles continue to positively impact [its] customer retention.”<sup>8</sup>
- Helped mitigate legacy service declines: As part of its effort to “mitigate” declines in its legacy services, the Company remained “focused on efforts to ... promote long-term relationships with our customers through bundling of integrated services.”<sup>9</sup>
- Attracted customers and led to increased usage of services: CenturyLink claimed that, “in addition to bundle discounts, we also offer limited time promotions on our broadband service for prospective customers who want our broadband service in their bundle, which further aids our ability to attract and retain customers and increase usage of our services.”<sup>10</sup>
- Enabled CenturyLink to effectively compete: CenturyLink represented that “[i]n order to remain competitive, we believe continually increasing connection speeds is important. As a result, we continue to invest in our network, which allows for the delivery of higher speed broadband services. We also continue to expand our marketing and product bundling efforts by offering a variety of bundled products and services with various pricing discounts, as we compete in a maturing market in which a significant portion of consumers already have broadband services.”<sup>11</sup>

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<sup>8</sup> 2012 Annual Report, 2013 Annual Report, 2014 Annual Report, 2015 Annual Report, and 2016 Annual Report.

<sup>9</sup> 2012 Annual Report, 2013 Annual Report, 2014 Annual Report, 2015 Annual Report, 2016 Annual Report; CenturyLink’s Quarterly Reports on Form 10-Q filed on August 8, 2013, November 8, 2013, May 8, 2014, August 7, 2014, November 6, 2014, May 6, 2015, August 6, 2015, November 5, 2015, May 5, 2016, August 4, 2016, November 4, 2016, and May 5, 2017; and Definitive Proxy Statement on Form DEF 14A filed April 10, 2013, April 16, 2014, April 8, 2015, April 5, 2016, and April 13, 2017.

<sup>10</sup> 2012 Annual Report and 2013 Annual Report.

<sup>11</sup> 2014 Annual Report, 2015 Annual Report, and 2016 Annual Report.



206. Defendants also made similar statements concerning the benefits and impact of the Company's "bundling" strategy during investor conference calls and presentations throughout the Class Period, including those set forth in paragraphs ¶¶58-59 above and set forth in the chart attached as Appendix A.

207. The statements set forth above in ¶¶205-06 describing CenturyLink's "bundling" strategy were materially false and misleading because, as described in Section IV, rather than "offer...customers the ability to bundle multiple products," CenturyLink fraudulently and routinely added services that customers did not request and did not wish to "bundle." As set forth above in Section IV, CenturyLink's "bundling" strategy was frequently pursued by omitting key facts concerning "bundled" service packages, such as the existence and/or price of charges for individual services included within a "bundle" (e.g., @Ease and LineGuard), as well as terms and conditions for "bundle" package discounts. Moreover, CenturyLink routinely refused to honor requests by customers to cancel services, including requests to cancel services that customers never agreed to or requested. Thus, in truth, CenturyLink's strategy was not to "enhance" its services by "offering a comprehensive bundle of services" but to inflate the Company's revenues by adding improper charges and services to customers' bills. Rather than "promote long-term relationships" and "enhance customer loyalty," these practices greatly jeopardized the Company's ability to retain customers and ultimately threatened the sustainability of the Company's reported revenues.

**4. False And Misleading Statements Concerning CenturyLink's Pricing and Discounting Strategies and the Demand for and Quality of CenturyLink's Offerings**

208. Defendants also repeatedly claimed that specific pricing and marketing strategies, as well as the quality and demand for specific CenturyLink services, were responsible for the financial performance of CenturyLink's consumer segment.

209. Among other things, Defendants represented that CenturyLink's strategy of imposing select "price increases" on certain products and changing various offered "discounts" impacted revenues. For example, during a February 11, 2015 investor call addressing fourth-quarter and year-end 2014 results, Defendant Puckett explained that select price increases in CenturyLink's Prism TV services, as well as "price increases" on "different categories of really access lines and other places," had a "positive impact" on the \$1.494 billion in consumer revenues CenturyLink reported for the quarter. According to Defendant Puckett, these price increases were based on a methodology that CenturyLink had effectively used before, explaining that "we have a pretty good methodology that we've used over the years in terms of the lifecycle of products and price increases. We're just following our process there."

210. Defendants similarly highlighted CenturyLink's supposedly attractive "higher bandwidth and IPTV" services as responsible for revenues in the consumer segment in the first and second quarters of 2015. For example, during a November 4, 2015 conference call addressing the Company's third quarter 2015 results, Defendant Post explained that "[f]aster broadband speeds and hosting solutions are at the top of many of customers' list of needs," and that CenturyLink consumer revenues experienced "solid

year-over-year growth” by “attracting more high-value customers and we have increased our ARPU through the continued launch of GPON, higher-value bundled sales and select pricing increases.” Similarly, on December 7, 2015, at the UBS Global Media and Communications Conference, in response to an analyst’s questions concerning revenue stability, Defendant Ewing stated, “if you look at the consumer side of the business, between the increase in revenues that we have seen from high-speed Internet as well as our Prism TV service and price increases, select price increases that we have done, we’ve been able to see real stable revenue on the consumer side.”

211. These statements were materially false and misleading. It was materially false and misleading to represent that select price increases, based on pricing strategies that CenturyLink had “used over the years in terms of the lifecycle of products,” were responsible for revenue gains when, in truth, a highly material portion of the Company’s reported revenues was obtained through fraudulent cramming. Further, it was false and misleading for Defendants to attribute revenue growth to “attracting more high-value customers” and increased ARPU through “higher-value bundled sales and select price increases” while concealing that CenturyLink’s higher ARPU was at least in part achieved through illegal cramming.

212. It was also materially false and misleading for Defendants to represent that “consumer demand” for the Company’s purportedly “attractive” high-bandwidth and Prism TV offerings was responsible for the Company’s consumer revenue growth when, in reality, a highly material portion of CenturyLink’s reported revenues were achieved through illegal cramming. In truth, as described above in Section IV, the Company’s

revenue performance was materially impacted by CenturyLink's routine failure to properly disclose terms and conditions concerning pricing discounts, systematic refusal to honor prices quoted to customers at the time of sale, and other improper and illegal billing practices.

**B. False And Misleading Statements Covering Up Defendants' Secret Attempt to Address the Company's Cramming Crisis**

213. As set forth above in Section IV, by 2014, Defendants recognized that CenturyLink's institutionalized cramming had reached crisis levels, that the Company had to "do something about our call centers," and secretly undertook dramatic steps to address it. Specifically, CenturyLink implemented a significant change to the Company's sales employee performance assessment model, switching to a "behavioral" coaching model in which the failure of sales representatives to meet quotas no longer led to immediate termination. While the new method led to a sharp decline customer complaints and terminations for unethical behavior after several months, the change also led to a decline in sales. As soon as sales declined, however, the Company reverted back to the prior method almost immediately because CenturyLink's senior management could not tolerate any decline in revenues.

214. The steps that CenturyLink took to address the cramming crisis—and its quick abandonment of those measures—had an immediate and material effect on the Company's reported financial performance. Instead of disclosing the true reasons for those results, however, Defendants created a false narrative that declining revenues (and the later

rebound) were the result of a deliberate strategy the Company pursued to focus on “higher value” customers, generate higher ARPU and reduce “churn.”

215. Specifically, Defendants represented that a “pivot” to reinvigorate the Company’s “bundling” strategy, additional promotional efforts, select price increases and changes to the Company’s customer targets were responsible for the fluctuations in the performance of the Company’s consumer segment. For example, during the Company’s August 5, 2015 earnings call for second quarter 2015, Defendant Post told investors that the Company was “tightening our credit policies for our internet-only customers to reduce sales to customers who tend to change internet providers frequently, leaving unpaid balances when they exit.” In other words, Defendant Post sought to blame a decline in revenues on supposedly less creditworthy customers, while at the same time suggesting that the Company’s effort to address this “problem” was also responsible for the reported decline in revenues. Indeed, Defendant Post represented that the Company’s “credit tightening” strategy would help ensure more consistent and sustainable revenues from more dependable, paying customers going forward.

216. Similarly, at the Oppenheimer Technology, Internet & Communications Conference on August 12, 2015, in a response to a question about competing on price with cable providers, Defendant Ewing explained the changes CenturyLink had made to its “discount” pricing strategy and efforts to tighten credit requirements:

So we are still somewhat discounted, I believe, to the cable companies. Although, again, as I mentioned, we have increased our prices both for our broadband customers as well as our Prism TV customers to keep up with the content cost increases there.

The other thing that we are doing is we are doing less discounting on the front end in terms of customers. As well as increasing our credit requirements somewhat, especially for the customers who don't buy their Internet in a bundle, who basically just come to us and want standalone high-speed Internet service. So we're increasing the credit requirements there a little bit to try to mitigate some of the churn that we've been seeing there.

217. In subsequent quarters, Defendants continued to represent that these strategies were responsible for the consumer segment's performance, and would continue having the intended effect of increasing ARPU and reducing churn in an effort to drive revenue growth over the long term. For example, during the Company's third quarter 2015 earnings call on November 4, 2015, Defendant Ewing explained that "high-speed internet and Prism TV net subscriber growth was negatively impacted" due to "tightening our credit and collection processes," but that "these adjustments had little impact on revenue and should actually help improve our broadband growth in 2016 due to lower churn."

218. The representations in ¶¶213-17 above were materially false and misleading. It was materially false and misleading to blame the consumer segment's faltering performance on strategies to "tighten" credit requirements and shift to higher ARPU customers when, in reality, the decline in revenues was attributable to a corresponding decline in illegal cramming, and the Company's secret efforts to "do something about" its call centers.

**1. False And Misleading Statements Concerning Defendants' "Pivot" and Revenue Rebound Based on A Purported Shift in Strategy to Focus on High ARPU Customers**

219. As set forth in Section IV, CenturyLink abandoned the behavioral coaching model and returned to its prior strict enforcement of sales quotas almost "immediately"

after the reduction in cramming led to a decline in revenues. And not long after the Company reverted back to the metrics-based system, CenturyLink returned to form, with cramming and revenues rebounding in short order.

220. Again, rather than disclose the true reasons behind the changes in the Company's financial performance, Defendants attributed the rebound to the supposedly legitimate steps that the Company had taken to address the disappointing results in the first half of 2015. Specifically, over the next several quarters, Defendants characterized the rejuvenated consumer segment performance as the result of a shift in strategy. At the same time, Defendants sought to distinguish CenturyLink's sales practices from its competitors, highlighting the Company's purportedly legitimate and conservative approach to issuing price discounts and credits, and its refusal to "add a lot of fees" to customers' bills.

221. For example, in announcing year-end results on February 10, 2016, Defendant Post highlighted the "aggressive corrective action" the Company had taken – including the realignment of the sales force and new leadership appointments (referencing Douglas' replacement of Puckett) – to address the slumping revenue numbers in the first two quarters of the year.

222. Similarly, on that call, Defendant Ewing told investors that the improved results were the result of a renewed focus on "churn reduction" and strategy change to "keep the customers we have and try to make some of the price declines and credits that we've been issuing smaller." In other words, Defendant Ewing attributed the improved performance to a more conservative approach to providing discounts and credits—

suggesting that the Company had previously been overly generous in issuing “credits” to resolve customer billing disputes.

223. Defendants repeated these same themes in the following quarterly earnings report. Specifically, during the Company’s first quarter 2016 earnings call on May 4, 2016, Defendant Douglas told investors that consumer segment results were impacted by the Company’s effort to refocus on its “bundling” strategy explaining. According to Defendant Douglas, although the purported strategy “pivot” had led to temporary subscriber declines, it would soon translate into more dependable and sustainable revenues as a result of lower churn and higher ARPU:

Some of the pressures that we’re facing in the business have to do with a slight adjustment in strategy. For example, in the high-speed internet realm, what we did was we pivoted from an approach that was pure broadband, to one that’s more traditional bundled broadband. We did that in the latter part of FY15. And so, we’re starting to work through what that means in the first part of FY16, and we expect that, that will continue to work through the middle part of the year of FY16. But that pivot to the more traditional approach to high-speed bandwidth in the consumer segment especially, should allow us to have customers that have -- less proclivity to churn and a higher ARPU. So we think that is going to be something that we will benefit from in the second half of the year and into 2017.

224. Most importantly, Douglas further clarified that the purported shift in broadband strategy was based on a “competitive analysis” and that the Company’s ARPU figures were legitimate and, unlike those of CenturyLink’s competitors, were not inflated by unwanted fees:

**Question – Oppenheimer Analyst:** Can you give some examples of what you mean by, more advanced broadband services, or more bundled broadband services? Also how does your ARPU -- maybe can talk about your broadband average ARPU, and maybe how does that compare to your competitors? ....



**Answer – Dean Douglas:** Okay. So let’s talk about the examples of what we mean by bundled broadband services, so that the traditional high-speed internet services are really what you’d expect in a double play or triple play. So it’s not only a high speed, but it’s also video, and some voice technology as well. And so, that’s pretty much a typical broadband suite of services.

When you look at the Prism adds that we did in the first quarter of this year, 53% of them were with new customers. So you’re now starting to see services like Prism attract new customers, that were not customers of Century Link, and they’re dragging along broadband services with that video play. So 98% of those customers that signed up for Prism in the first quarter, also signed up for our broadband services.

And so, we see in those markets that bundling the technologies, broadband, video and the like, really do provide a much more compelling offering for both our customer base, as well as our folks that were with either competitors or didn’t have the service at all, but nonetheless were not customers of CenturyLink. And so, as we think about how we go forward with -- to the marketplace, we obviously do a lot of competitive analysis.

So I would tell you that our ARPUs are consistent with what you’d see at an ARPU level in our competitors. And we see competition adding a lot of fees. And so, that’s where there might be a little bit of a delta, but we’re working through, and constantly monitoring what our competitors are doing in the marketplace, with regard to the average ARPUs in our business.

225. The statements in ¶¶221-24 above were materially false and misleading. It was materially false and misleading for Defendants to attribute the rebound in consumer revenues to the “corrective actions” Defendant Post described because, in truth, these revenue gains were driven by the illegal cramming practices Defendants failed to correct. It was also materially false and misleading for Defendant Ewing to represent that revenue growth was the result of the Company limiting the amount of “credits” it gave customers while omitting the highly material fact that CenturyLink had for years employed a policy of limiting the amount of credits it would offer customers who were improperly billed and,

in fact, routinely and systematically failed to honor the prices customers were quoted. It was also false and misleading for Defendant Douglas to represent that CenturyLink's competitors "add[ed] a lot of fees" and to imply that CenturyLink did not (and this was the reason for the "delta" in the ARPU) because, in truth, CenturyLink systematically and unlawfully added fees and other unauthorized charges to customers' bills.

226. Defendants continued to issue numerous false and misleading statements concerning the purported "pivot" in strategy that coincided with the rebound in consumer revenues. For example, during the Company's second quarter 2016 earnings call on August 3, 2016, Defendants again highlighted bundling and credit tightening as responsible for the Company's disappointing broadband subscriber numbers, while touting the higher ARPU supposedly generated by this shift. For example, Defendant Post noted that "we continue to pivot toward the sale of higher speed, higher value bundle offerings, to better credit quality customers," who have "higher ARPU, lower churn, and a much higher lifetime value than lower speed, lower credit, standalone broadband customers."

227. Defendant Post claimed that this strategy would prove beneficial, stating that "this is the right approach for the long term health of our business, even though it does have an impact on broadband units, some of which we saw during the second quarter." Defendant Post downplayed any concerns about subscriber net losses, however, noting that approximately 20% of the 65,000 broadband subscriber decline the Company reported for the quarter was "driven by a higher than expected number of slow and non-paying customer churn" and that a "significant percentage of the churn is related to standalone broadband customers who are less loyal than our traditional bundled customers." In other words,

Defendant Post explained that the subscriber declines were caused by the very problems Defendants' purported shift in strategy was intended to address.

228. On that same conference call, Defendant Douglas reiterated the Company's ongoing "shift" to target "bundled customers" as helping to drive "better ARPU, as well as a longer lifetime revenue base for that customer." According to Douglas, the Company was seeing "churn level for our pure customers, or standalone high-speed customers" that was "double that of what we're seeing in those bundled customers," explaining that this signified a "very, very significant churn rate in those [pure, non-bundled] customers." Douglas further clarified that, in addition to the shift to more dependable bundled customers, the Company was and would continue generating revenue growth through price increases, noting that "we're continuing to drive some of those price increases into the second half, and we'll see those manifest themselves in the second half, as well."

229. In addition, Defendants also began to highlight another strategic initiative focused on customer retention. Specifically, Defendant Post told investors that CenturyLink had "increased the level of focus in [its] call centers in first call resolution for our customers." According to Defendant Post, the "focus on first call resolution is another change we believe may have affected our broadband additions for the quarter as we focus more on the customer issues rather than selling, but we believe the improved customer experience will improve customer retention and improve our revenue over time."

230. Defendants continued to highlight the purported strategy shift in fielding questions about revenue and subscriber fluctuations, assuring investors that the Company's focus on "bundled" and higher ARPU customers would lead to more predictable and

dependable cash flows. For example, during an August 10, 2016 presentation at the Oppenheimer Technology, Internet & Communications Conference, CenturyLink's Head of Investor Relations Tony Davis reminded investors that "we're pivoting away from the sale of standalone broadband service and going back to more of a bundle play, higher ARPU, longer lifetime value of the customer, less churn. And so we're in the middle of that pivot as we talked a lot about on the quarter call."

231. Similarly, during a September 21, 2016 presentation at the Goldman Sachs Communicopia Conference, Defendant Post discussed the purported shift in strategy, and the supposed benefits that would provide in terms of more dependable cash flows:

We have decided that we -- we were focused on quantity, driving more customers in. We've changed our approach there. We look at the propensity of the churn of those single service customers, look at their credit worthiness. A lot of them weren't paying, and the ARPU issue.

We believe that we are stronger and better off going forward to focus on high-value customers, not what's pointed at the numbers, but get really strong customers that are going to drive value, stability going forward that are more loyal and pay their bills.

So we believe the high-value focus is very important for us and we are confident it could change the stability and the fluctuation in those numbers. So it's going to take some time to work through the base of that single service customer base, but we're seeing improvement already and we expect going into in 2017 we'll see even more.

232. On that same call, Defendant Ewing explained that the Company had implemented an initiative to prevent customers from leaving when the promotional discount periods on their contracts expired:

The other thing that we're doing there is we're working on churn and mitigating churn. So what we find is that when customers come off of a promotion and their rate goes up, that's when they are most likely to

churn. So we're putting programs in place that really won't help the fourth quarter so much as next year, but it will give us an opportunity to touch those customers to try to prevent that churn event from happening either by potentially keeping their rates lower than they would otherwise move up to or to try to help sell them to a higher speed service.

233. In reporting quarterly results for the third and fourth quarters of 2016, Defendants told investors that these strategies were working, and were reflected in the Company's reported results. For example, during an October 31, 2016 conference call to discuss the Company's third quarter results (and the announcement of the Level 3 acquisition), Defendant Post explained:

We remain focused on continuing our pivot to higher quality broadband customers and while we still have more improvement to achieve on a year-over-year basis in the third quarter, we added higher ARPU customers, lower churn and fewer...high-risk credit customers in the quarter. So we are making that pivot with our consumer base and we saw those trends in the third quarter.

234. Similarly, in reporting 2016 fourth quarter and year-end results on February 8, 2017, Defendant Post again cited the strategy shift as partly to blame for the reported slower growth in strategic consumer revenues, explaining that lower growth in consumer broadband revenue was "driven by unit declines as we shifted our marketing spend more toward bundled, higher-speed solutions and tightened our credit policy," as well as "slower growth in consumer video subscribers and revenues than originally anticipated, and that obviously had an impact on our results." Defendants further claimed that, despite this slowdown, the strategy had already begun to work. For example, Defendant Post told investors on that call that the "focus on improving our customer experience is beginning to

be seen in our results, as we saw a 15 basis points improvement in consumer broadband churn year-over-year and a 30 basis point improvement in Prism TV churn.”

235. Defendants repeated this refrain during an investor presentation on March 7, 2017, where they explained that the shift in strategy had already impacted results, and would continue to do so. Defendant Ewing explained that, “on the consumer side, basically, we have upped our credit standards from a broadband consumer standpoint and we feel like the customers that we are signing up are better quality customers. They are for the most part 40 meg or higher, which tend to churn less.” Defendant Post said this change would also help going forward, as the Company “continued to see improvement in our churn rate and reduce customer credits,” and anticipated that “a significant portion of the second half improvement [included in 2017 guidance] to be driven by the improvement in the churn rate.”

236. The statements set forth above in ¶¶226-35 were materially false and misleading. As described in Section IV, after CenturyLink aborted its attempt to address the cramming crisis at the Company, CenturyLink immediately reverted back to its prior deceptive sales practices, which quickly returned to serving as a material undisclosed driver of CenturyLink’s reported financial results. Accordingly, it was materially false and misleading to claim that the Company’s strategies to focus on “higher value,” more “loyal” and “creditworthy” customers had contributed to the financial performance of the consumer segment because, in reality, the Company’s results were materially impacted by CenturyLink’s deceptive systemic cramming practices. Moreover, it was materially false and misleading to blame the Company’s “other” presumably less “loyal” or “creditworthy”

customers for CenturyLink's previous lackluster results when, in truth, CenturyLink routinely and systematically refused to honor the prices it quoted customers, failed to disclose key terms of contracts, and added services to customers' bills that they did not request or authorize. Further, it was materially false and misleading to claim that CenturyLink was attempting to improve its customer experience and customer retention when the Company had, in fact, returned to cramming its customers.

**C. Materially False And Misleading Statements And Omissions Concerning CenturyLink's Purported Business Integrity, Legal Compliance, and Honesty In Sales Practices**

237. Throughout the Class Period, CenturyLink bolstered investors' confidence in its reported financial results and the legitimacy of the Company's operating activities by directing investors to the Company's official Code of Conduct, which was published on CenturyLink's website and introduced by a message from Defendant Post, publicly affirming its compliance with the numerous regulations governing its business, and denying any improper conduct.

238. In each of CenturyLink's annual reports filed during the Class Period, CenturyLink stated as follows with respect to its Code of Conduct:

We have adopted written codes of conduct that serve as the code of ethics applicable to our directors, officers and employees, in accordance with applicable laws and rules promulgated by the SEC and the New York Stock Exchange. In the event that we make any changes (other than by a technical, administrative or non-substantive amendment) to, or provide any waivers from, the provisions of our code of conduct applicable to our directors or executive officers, we intend to disclose these events on our website or in a report on Form 8-K filed with the SEC.

239. The Company’s SEC filings referred to the Code of Conduct explicitly, and directed investors to the Code of Conduct on CenturyLink’s website. Further, according to each of CenturyLink’s Definitive Proxy Statements for Fiscal Years 2013 through 2017, “[a]ll of our directors, officers and employees are required to abide by our long-standing ethics and compliance policies and programs, which include standards of business conduct.”

240. Under CenturyLink’s Code of Conduct, CenturyLink committed that it would:

Never misstate facts or confuse or mislead consumers about Company advertisements or promotions....

Follow all applicable sales policies and procedures to ensure we do not engage in unethical or deceptive sales practices....

Never place or record an order for our products and services for a customer without that customer’s authorization.....

Be truthful in all dealings with customers, employees, shareholders, business associates and the general public.

241. The statements set forth above in ¶¶238-40 were materially false and misleading because, as described in Section IV, CenturyLink systematically misquoted the prices of its services, denied promised discounts, and charged customers for services that they did not request. As the Company continued to engage in its institutionalized cramming scheme throughout the class period, customers complained and consumer advocacy groups and the media took notice. In articles and publicly-filed documents throughout the Class Period, when confronted with allegations of sales misconduct at the Company, CenturyLink repeatedly denied those allegations and/or made other false and



misleading statements about the Company's practices, conduct, and attempts to remedy identified issues.

242. For example, in response to an October 6, 2016 story published by a Seattle television station reporting on an investigation of CenturyLink by the Seattle Office of Cable Communications in connection with improper billing, the Company made the following statement:

Some of our customers have experienced customer service and billing challenges. We take these concerns seriously and have implemented process and system improvements designed to resolve their concerns. We are working diligently to identify immediate changes, as well as other changes that will require a few months to implement. We're fully committed to resolving these issues as quickly as possible in order to ensure a high-quality experience for our customers," said Sue Anderson, vice president of operations in Washington.<sup>12</sup>

243. Similarly, when the Star Tribune reported that "[t]he Better Business Bureau of Minnesota ha[d] logged 1,150 complaints against CenturyLink in Minnesota since 2015, compared with 450 for Comcast, 300 for DirecTV and 170 for the Dish Network," CenturyLink spokeswoman Molly Clemen said, "We are committed to providing the best quality experience and will continue to work to meet and exceed our customers' expectations in our markets."<sup>13</sup>

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<sup>12</sup> CenturyLink Held Accountable for Billing, Service Issues, KING5 NEWS, Oct. 6, 2016, <http://www.king5.com/article/money/consumer/centurylink-held-accountable-for-billing-service-issues/329020908>.

<sup>13</sup> Why More Folks Aren't Cutting the Cord on Cable TV, Star Tribune, Oct. 18, 2016, <http://www.startribune.com/why-folks-aren-t-cutting-the-cord-on-cable-tv/397326141/>.

244. Months later, a Portland, Oregon news outlet reported on increasing complaints against the Company, noting that the Better Business Bureau had logged 11,954 complaints about CenturyLink in the prior three years and quoting a spokesperson for the Better Business Bureau who said:

Consistently consumers are telling us about the same type of issues. They are signing up and they are understanding a certain price and when their bill does not reflect that price they call in for corrections—they never see corrections on their bills. It's not isolated to folks in Oregon. We are seeing those complaints in the markets in which CenturyLink does business.<sup>14</sup>

CenturyLink offered the following misleading response:

CenturyLink strives to provide the best possible service at all times. As a customer-first business, we take any complaint seriously and work diligently to provide each customer with a fair and quick resolution. And where our investigations into complaints show that process changes can improve the customer experience, we make improvements and incorporate them into our employee training and customer outreach. Improving the customer experience is our constant objective, and customer feedback, even if negative, is an important part of this continuous effort.

245. CenturyLink took a similar tack in responding to several other media reports about its billing misconduct. As above, in those instances, CenturyLink denied any systematic wrongdoing, characterized any claimed instances of improper billing as isolated and contrary to Company policy, and told the public that the Company would take swift action to remedy any inappropriate billing and correct any problems that had been identified. For example, in response to a report published by a Denver, Colorado television station, CenturyLink falsely represented that, “[a]s a customer-first business, we take any

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<sup>14</sup> Growing Pains: CenturyLink Consumer Complaints Spike as Service Expands, KGW8 NEWS, Feb. 1, 2017, <http://www.kgw.com/article/news/investigations/growing-pains-centurylink-consumer-complaints-spike-as-service-expands/283-395525834>.

complaint seriously and work diligently to provide each customer with a fair and quick resolution,” and that where “investigations into complaints show that process changes can improve the customer experience, we make improvements and incorporate them into our employee training and customer outreach.”<sup>15</sup> And in a news article about “dozens of [CenturyLink] cable subscribers who complained about billing nightmares and bait and switch sales tactics,” CenturyLink responded to allegations by again emphasizing its purported commitment to and focus on its customers, stating that “CenturyLink values our customers and strives to provide the best possible experience and customer service at all times.... We are committed to providing the best quality experience and will continue to work to meet and exceed our customers’ expectations.”<sup>16</sup>

246. The statements set forth above in ¶¶238-45 were materially false and misleading. CenturyLink was not a “customer-first business,” did not take the thousands of complaints and millions of violations “seriously” or “work diligently to provide each customer with a fair and quick resolution,” and did not “strive[] to provide the best possible experience and customer service at all times.” To the contrary, as described above in Section IV, CenturyLink’s “customer service” apparatus was not designed to provide customer service but rather to promote sales, even sales obtained through fraud. Indeed,

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<sup>15</sup> Denver Better Business Bureau Issues Warning About CenturyLink, KDVR, Jan. 27, 2017, <http://kdvr.com/2017/01/27/denver-better-business-bureau-issues-warning-about-centurylink/>.

<sup>16</sup> CenturyLink Customers Complain About Billing Nightmares, KING5 NEWS, May 25, 2017, <http://www.king5.com/article/money/consumer/centurylink-customers-complain-about-billing-nightmares/441975389>.

rather than “provide each customer with a fair and quick resolution,” the Company’s customer service personnel were instructed to make sales rather than resolve complaints. Customer service personnel were in fact limited in the amount of “credits” they were permitted to provide to customers to resolve complaints—without regard to the nature of the complaints or the amount customers disputed—and were in fact rewarded for limiting the amount of “credits” they provided.

247. As discussed above, on April 6, 2016, CenturyLink entered into a publicly-filed Assurance of Discontinuance with the Arizona Attorney General. In the Assurance of Discontinuance, the Arizona Attorney General explained each alleged violation of Arizona Consumer law it believed CenturyLink engaged in, and—for each allegation—CenturyLink “expressly deni[ed]” the allegation. In fact, not only did CenturyLink deny the Attorney General’s allegations of providing incomplete information, the Company affirmatively stated that it fully disclosed all such information to consumers.

248. Specifically, in response to the Arizona Attorney General’s allegation that CenturyLink failed to adequately disclose material qualifying conditions to advertised promotional rates, CenturyLink stated that it:

expressly denies these allegations and alleges that all material qualifying conditions that apply to its advertised promotional rates, including but not limited to term commitments and authorization that CenturyLink may automatically withdraw monthly payments from financial accounts were fully disclosed.

249. In response to the Arizona Attorney General’s allegation that CenturyLink failed to adequately disclose that a promotion rate would end before the consumers’ term

commitment expired, CenturyLink stated that it “expressly denies these allegations and alleges that these terms were fully disclosed.”

250. In response to the Arizona Attorney General’s allegation that CenturyLink failed to adequately disclose early termination fees, CenturyLink stated that it “expressly denies these allegations and alleges that these terms were fully disclosed.”

251. In response to the Arizona Attorney General’s allegation that it sold consumers levels of high speed internet that were not available at consumers’ addresses when, CenturyLink stated that it “expressly denies these allegations and alleges that these terms were fully disclosed.”

252. In response to the Arizona Attorney General’s allegation that it failed to adequately disclose that a consumer will be required to purchase or lease a modem/router for high speed internet service, CenturyLink stated that it “expressly denies these allegations and alleges that these terms were fully disclosed.”

253. In response to the Arizona Attorney General’s allegation that CenturyLink failed to adequately disclose that a consumer will be charged an installation fee for certain services and products, CenturyLink stated that it “expressly denies these allegations and alleges that these terms were fully disclosed.”

254. Furthermore, CenturyLink also “denie[d] any violation of state, federal, or local law, that any actions, inactions, or practices of CenturyLink were a consumer fraud or otherwise legally improper” and “expressly denie[d] that its policies, practices, or procedures... fail to meet or violate any applicable standard.”

255. CenturyLink’s statements set forth above in ¶¶247-54 were materially false and misleading. CenturyLink was not “committed to customer service”: it in fact employed a policy and practice of routinely engaging in misleading and deceptive practices which harmed its customers by, among other things, charging them for services and products they did not request, misquoting prices at the point of sale, and other similarly deceptive conduct, as set forth above in Section IV. Moreover, CenturyLink’s “express[] deni[als]” of each of the allegations set forth in the Arizona Assurance of Discontinuance were false, because, as is set forth more fully above in Section IV, CenturyLink in fact engaged in the alleged activities. In addition, CenturyLink’s denial that it violated any “state, federal, or local law” and “express[] deni[al] that its policies, practices, or procedures...fail to meet or violate any applicable standard” was false because CenturyLink’s cramming scheme in fact violated numerous consumer protection laws and regulations.

**D. Materially False And Misleading Statements And Omissions Concerning CenturyLink’s Regulatory Risks**

256. Throughout the Class Period, CenturyLink represented that it faced hypothetical risks in connection with the high level of regulatory oversight it experienced. For example, in the Company’s 2013 Annual Report, CenturyLink warned investors that the Company “operate[d] in a highly regulated industry and are therefore exposed to restrictions on our operations and a variety of claims relating to such regulation” (emphasis in original). CenturyLink explained that it was subject to “significant” regulation by the FCC and state utility commissions, and that it was “generally” required to “obtain and maintain certificates of authority or licenses from [regulatory] bodies in most territories

where we offer regulated services.” The Company warned that “the prescribed service standards and conditions imposed on us in connection with obtaining or acquiring control of these licenses may impose on us substantial costs and limitations.” It further warned:

We are also subject to numerous requirements and interpretations under various international, federal, state and local laws, rules and regulations, which are often quite detailed and occasionally in conflict with each other. Accordingly, we cannot ensure that we are always considered to be in compliance with all these requirements at any single point in time. The agencies responsible for the enforcement of these laws, rules and regulations may initiate inquiries or actions based on customer complaints or on their own initiative.

CenturyLink substantially repeated the risk warnings set forth above in each Form 10-K and Form 10-Q it filed during the Class Period.

257. CenturyLink explicitly told investors not to interpret a hypothetical risk as one that was, in fact, likely to occur. As Defendant Bailey explained in testimony before the Public Service Commission of Utah before the Class Period, the risk warnings contained in CenturyLink’s SEC filings were “not intended to suggest that the risks are likely outcomes.”

258. The statements set forth above in ¶¶256-57 were materially false and misleading. The statement that the service standards and conditions imposed on the Company in connection with obtaining licenses to operate in various locales “may” impose “substantial costs and limitations” was materially misleading because it set forth the risk as a mere possibility when Defendants knew that the service standards imposed upon CenturyLink did, in fact, impose substantial limitations on the Company’s existing operations. Indeed, as set forth above in Section IV, Defendants knew that the Company’s

institutionalized cramming model was explicitly prohibited by several of the service standards and conditions the Company represented it would comply with when entering into agreements with local regulators that were in effect during the Class Period.

259. Further, the statement that CenturyLink could not “ensure” that it could be considered “in compliance” with the requirements of “federal, state and local laws, rules and regulations” was materially misleading, because it set forth the risk of noncompliance with those laws as a mere possibility when, as set forth above in Section IV, Defendants knew that the Company’s institutionalized cramming model was, in fact, in direct violation of several “federal, state and local laws, rules and regulations,” and in any event that CenturyLink’s conduct rendered it highly unlikely that the Company could be considered “in compliance” with applicable laws, rules, and regulations.

260. In addition, the statement that “[t]he agencies responsible for the enforcement of [the] laws, rules and regulations [to which the Company was subject] may initiate inquiries or actions based on customer complaints or on their own initiative” was materially misleading, because it characterized the risk of inquiries or enforcement actions as a mere possibility when, as set forth in Section IV, Defendants knew that, in fact, several inquiries and enforcement actions had been instituted against the Company, and that the Company’s conduct in employing an institutionalized cramming model made further such inquiries and actions highly likely, not merely possible.

#### **E. False and Misleading Omissions In CenturyLink’s SEC Filings**

261. CenturyLink’s SEC filings, including the Forms 10-Q and Forms 10-K filed during the Class Period, failed to disclose information required to be disclosed therein



under Item 303(a) of Regulation S-K and Securities Act Release No. 33-8350. 17 C.F.R. § 299.303. Among other things, Item 303 required CenturyLink to disclose, among other things, “any known trends or uncertainties that have had or that the registrant reasonably expects will have a material favorable or unfavorable impact on net sales or revenues or income from continuing operations.”

262. Throughout the Class Period, CenturyLink was required under Item 303 to disclose the fact that the Company’s illegal and deceptive sales practices were a material driver of the Company’s reported revenue for its consumer and small business segments. As set forth above in Section IV, Defendants knew that these practices had a material impact on the Company’s revenues and income, and presented a significant uncertainty given that these practices were illegal and the revenues and income they generated were therefore unsustainable. CenturyLink’s senior management specifically approved significant changes to the Company’s sales employee discipline and compensation scheme in order to address these practices in 2014. And once these changes to employee assessment and discipline were made, they immediately materially impacted revenues—so much so, that CenturyLink reverted back to its prior method of disciplining sales employees almost immediately.

263. CenturyLink was required to disclose this information to the SEC when the agency directly questioned the Company about its disclosures concerning the operating performance of its consumer segment and the Company’s compliance with Item 303. For these reasons, among others, the Company’s September 22, 2015 response letter attributing the consumer segment’s performance to “price compression and customer disconnects

caused by competition” – without disclosing the changes to the Company’s sales practices and their impact on CenturyLink’s revenues – was materially misleading, and only underscores the abject failure of CenturyLink to comply with Item 303.

## **IX. LOSS CAUSATION**

264. Defendants’ wrongful conduct, as alleged herein, directly and proximately caused Plaintiffs and the Class to suffer substantial losses. During the Class Period, Plaintiffs and the Class purchased CenturyLink securities at artificially inflated prices and were damaged thereby when the price of CenturyLink securities declined when the truth was revealed. The price of CenturyLink’s securities significantly declined (causing investors to suffer losses) when Defendants’ misrepresentations, and/or the information alleged herein to have been concealed from the market, and/or the effects thereof, were revealed, and/or the risks that had been fraudulently concealed by Defendants materialized.

265. Specifically, Defendants’ materially false and misleading statements misrepresented the true reasons behind the growth and fluctuations in the Company’s reported revenues, the Company’s prospects for future revenue growth, and its financial performance. When those statements were corrected and the risks concealed by them materialized, including when the disclosure of the Company’s “Wells Fargo-like” scheme revealed that the Company had engaged in illegal sales practices including unauthorized cramming of customer accounts, investors suffered losses as the price of CenturyLink securities declined.

266. As a result of the disclosure of the truth of Defendants’ fraud, CenturyLink’s stock price declined over 16%, from a close of \$26.95 on June 15, 2017 to close at \$22.50

on July 12, 2017. Similarly, the price of the 7.60% Senior Notes suffered statistically significant declines, and ultimately fell nearly 6%, from a price of \$97.533 on June 15, 2016 to a closing price of \$91.887 on July 12, 2017. The disclosures that corrected the market price of CenturyLink securities and reduced the artificial inflation caused by the Defendants' materially false and misleading statements are summarized in the following chart, which identifies each corrective disclosure event, the price declines in CenturyLink common stock resulting from the event, and, for purposes of comparison, the percentage change in the S&P 500 Index on each event date:

<u><b>Date</b></u>	<u><b>Corrective Event</b></u>	<u><b>Closing Stock Price</b></u>	<u><b>Common Stock Price Change</b></u>	<u><b>S&amp;P 500 Price Change</b></u>
6/16/2017	<i>Bloomberg</i> published a story revealing that a CenturyLink whistleblower was fired after raising concerns about the Company's fraudulent business practices with Defendant Post.	\$25.72	<b>-4.72%</b>	0.03%
6/19/2017	Additional reports of consumer class actions alleging systemic billing misconduct.	\$25.36	<b>-2.35%</b>	0.84%
7/12/2017	The Minnesota Attorney General announced that it filed a lawsuit against CenturyLink alleging violations of state consumer protection laws after a year-long investigation.	\$22.50	<b>-4.13%</b>	0.74%

267. Accordingly, as a result of their purchases of CenturyLink publicly traded securities, Plaintiffs and other members of the Class suffered economic loss and damages.

## **X. CLASS ACTION ALLEGATIONS**

268. Plaintiffs bring this action as a class action pursuant to Rules 23(a) and (b)(3) of the Federal Rules of Civil Procedure on behalf of a Class consisting of all persons and entities who purchased or otherwise acquired CenturyLink's publicly traded securities during the period from March 1, 2013 to July 12, 2017, inclusive, and who were damaged thereby. Excluded from the Class are Defendants; CenturyLink's affiliates and subsidiaries; the officers and directors of CenturyLink and its subsidiaries and affiliates at all relevant times; members of the immediate family of any excluded person; heirs, successors, and assigns of any excluded person or entity; and any entity in which any excluded person has or had a controlling interest.

269. The members of the Class are so numerous that joinder of all members is impracticable. Throughout the Class Period, CenturyLink's common shares were actively traded on the New York Stock Exchange. As of February 16, 2017, CenturyLink had approximately 546.6 million shares of common stock issued and outstanding. Although the exact number of Class members is unknown to Plaintiffs at this time, Plaintiffs believe that there are at least thousands of members of the proposed Class. Members of the Class can be identified from records maintained by CenturyLink or its transfer agent(s), and may be notified of the pendency of this action by publication using a form of notice similar to that customarily used in securities class actions.

270. Lead Plaintiff's and Plaintiff's claims are typical of the claims of the members of the Class as all members of the Class were similarly damaged by Defendants' conduct as complained of herein.

271. Common questions of law and fact exist as to all members of the Class and predominate over any questions solely affecting individual members of the Class. Among the questions of fact and law common to the Class are:

- (a) whether Defendants' misrepresentations and omissions as alleged herein violated the federal securities laws;
- (b) whether Defendants' misrepresentations and omissions as alleged herein misrepresented material facts about, among other things, CenturyLink's billing practices and financial performance during the Class Period;
- (c) whether the Executive Defendants are personally liable for the alleged misrepresentations and omissions described herein;
- (d) whether Defendants' misrepresentations and omissions as alleged herein caused the Class members to suffer a compensable loss; and
- (e) whether the members of the Class have sustained damages, and the proper measure of damages.

272. Plaintiffs will fairly and adequately protect the interests of the members of the Class and have retained counsel competent and experienced in class actions and securities litigation. Plaintiffs have no interest that conflicts with the interests of the Class.

273. A class action is superior to all other available methods for the fair and efficient adjudication of this action. Joinder of all Class members is impracticable. Additionally, the damage suffered by some individual Class members may be small relative to the burden and expense of individual litigation, making it practically impossible for such members to redress individually the wrongs done to them. There will be no difficulty in the management of this action as a class action.

274. The names and addresses of those persons and entities that purchased or acquired CenturyLink's securities during the Class Period are available from

CenturyLink's transfer agent(s) or other sources. Notice may be provided to such class members via first-class mail using techniques and a form of notice similar to those customarily used in securities class actions.

## **XI. PRESUMPTION OF RELIANCE**

275. Plaintiffs are entitled to a presumption of reliance under *Affiliated Ute Citizens of Utah v. United States*, 406 U.S. 128 (1972), because the claims asserted herein against Defendants are predicated upon omissions of material fact that there was a duty to disclose.

276. Plaintiffs are also entitled to a presumption of reliance on Defendants' material misrepresentations and omissions pursuant to the fraud-on-the-market doctrine because, during the Class Period:

- (a) CenturyLink's common stock was actively traded in an efficient market on the NYSE;
- (b) CenturyLink's common stock traded at high weekly volumes, with an average of over 28.7 million shares traded each week during the Class Period. The average weekly turnover as a percentage of shares outstanding was approximately 5.1% (median of 4.3%), well surpassing the higher 2% threshold level of average weekly trading volume necessary for an efficient market;
- (c) CenturyLink's publicly-traded bonds, including CenturyLink's 7.60% Senior Notes, were listed and actively traded on over-the-counter markets and other national options exchanges, highly efficient markets, and promptly reacted to public information concerning CenturyLink;
- (d) As a regulated issuer, CenturyLink filed periodic public reports with the SEC;

- (e) CenturyLink was eligible to file registration statements with the SEC on Form S-3;
- (f) CenturyLink regularly communicated with public investors by means of established market communication mechanisms, including through regular dissemination of press releases on the major news wire services and through other wide-ranging public disclosures, such as communications with the financial press, securities analysts and other similar reporting services;
- (g) The market reacted promptly to public information disseminated by and concerning CenturyLink;
- (h) CenturyLink securities were covered by numerous securities analysts employed by major brokerage firms, including Barclays Capital, BMO Capital Markets, Bank of America Merrill Lynch, Citigroup, Cowen & Co., Deutsche Bank, Gabelli & Co., Goldman Sachs, Jeffries LLC, JPMorgan Chase & Co., Macquarie Research, Morgan Stanley, Nomura Securities International, Oppenheimer & Co., Raymond James & Associates, Inc., UBS, and Wells Fargo Securities;
- (i) Each of these reports was publicly available and entered the public marketplace;
- (j) The material misrepresentations and omissions alleged herein would tend to induce a reasonable investor to misjudge the value of CenturyLink securities; and
- (k) Without knowledge of the misrepresented or omitted material facts alleged herein, Plaintiffs and other members of the Class purchased or acquired CenturyLink securities between the time Defendants misrepresented or failed to disclose material facts and the time the true facts were disclosed.

277. Accordingly, the market for CenturyLink's publicly traded securities promptly digested current information with respect to CenturyLink from all publicly-available sources and reflected such information in the prices of those securities. Under these circumstances, all purchasers of the Company's publicly traded securities during the

Class Period suffered similar injury through their purchases at artificially inflated prices, and a presumption of reliance applies.

## **XII. NO SAFE HARBOR**

278. The statutory safe harbor applicable to forward-looking statements under certain circumstances does not apply to any of the false or misleading statements pleaded in this Complaint. The statements complained of herein were historical statements or statements of current facts and conditions at the time the statements were made. Further, to the extent that any of the false or misleading statements alleged herein can be construed as forward-looking, the statements were not accompanied by any meaningful cautionary language identifying important facts that could cause actual results to differ materially from those in the statements.

279. Alternatively, to the extent the statutory safe harbor otherwise would apply to any forward-looking statements pleaded herein, Defendants are liable for those false and misleading forward-looking statements because at the time each of those statements was made, the speakers knew the statement was false or misleading, or the statement was authorized or approved by an executive officer of CenturyLink who knew that the statement was materially false or misleading when made.

## **XIII. CAUSES OF ACTION**

### **COUNT I**

**FOR VIOLATIONS OF SECTION 10(b) OF THE EXCHANGE ACT AND  
RULE 10b-5 PROMULGATED THEREUNDER  
(Against Defendants CenturyLink, Post, Ewing, Cole, Puckett and  
Douglas)**



280. Plaintiffs repeat and re-allege each and every allegation set forth above as if fully set forth herein.

281. During the Class Period, Defendants CenturyLink, Post, Ewing, Cole, Puckett and Douglas carried out a plan, scheme and course of conduct which was intended to, and throughout the Class Period, did: (i) deceive the investing public regarding CenturyLink's business, operations, management and the intrinsic value of CenturyLink stock and other securities; (ii) enabled Defendants to artificially inflate the price of CenturyLink stock and other securities; and (iii) caused Plaintiffs and other members of the Class to purchase CenturyLink common stock and other securities at artificially inflated prices. In furtherance of this unlawful scheme, plan and course of conduct, Defendants jointly and individually (and each of them) took the actions set forth herein.

282. The Defendants named in this count: (i) employed devices, schemes, and artifices to defraud; (ii) made untrue statements of material facts or omitted to state material facts necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading; and (iii) engaged in acts, practices, and a course of business that operated as a fraud or deceit upon the purchasers of the Company's common stock during the Class Period in an effort to maintain artificially high market prices for CenturyLink common stock in violation of Section 10(b) of the Exchange Act and Rule 10b-5. The Defendants named in this count are sued as primary participants in the wrongful and illegal conduct charged herein. The Executive Defendants are also sued as controlling persons as alleged below.

283. These Defendants, individually and in concert, directly and indirectly, by the use, means or instrumentalities of interstate commerce and/or of the mails, engaged and participated in a continuous course of conduct to conceal adverse material information about the business, operations and future prospects of CenturyLink as specified herein.

284. These Defendants employed devices, scheme and artifices to defraud, while in possession of material adverse non-public information and engaged in acts, practices, and a course of conduct as alleged herein in an effort to assure investors of CenturyLink's value and performance and continued growth, which included the making of, and the participation in the making of, untrue statements of material facts and omitting to state material facts necessary in order to make the statements made about CenturyLink and its business operations and future prospects in light of the circumstances in which they were made, not misleading, as set forth more particularly herein, and engaged in transactions, practices and a course of business which operated as a fraud and deceit upon the purchasers of CenturyLink common stock during the Class Period.

285. These Defendants are liable for the following materially false and misleading statements and omissions made during the Class Period as alleged above in Section VIII:

- (a) Defendant CenturyLink: Defendant CenturyLink is liable for all the false and misleading statements and omissions made by itself, its spokespersons, and Defendants Post, Ewing, Cole, Puckett and Douglas, its senior most officers during the Class Period and lead spokespersons for the Company during that time, which are set forth above in Section VIII.
- (b) Defendant Post: Defendant Post is liable for the false and misleading statements and omissions made in the Company's Forms 10-Q filed on August 8, 2013, November 7, 2013, May 8, 2014, August 7, 2014, November 6, 2014, May 6, 2015, August 6, 2015, November 5, 2015,

May 5, 2016, August 4, 2016, November 4, 2016, and May 4, 2017 and Forms 10-K filed on March 1, 2013, February 27, 2014, February 24, 2015, February 20, 2016, and February 23, 2017 and for statements made in conference calls in which he participated during the Class Period, held on May 8, 2013, August 7, 2013, November 6, 2013, February 12, 2014, May 7, 2014, August 6, 2014, November 5, 2014, February 11, 2015, May 5, 2015, June 24, 2015, August 5, 2015, September 10, 2015, November 4, 2015, February 10, 2016, March 2, 2016, May 4, 2016, August 3, 2016, September 21, 2016, October 31, 2016, February 8, 2017, March 1, 2017, and May 3, 2017;

- (c) Defendant Ewing: Defendant Ewing is liable for the false and misleading statements and omissions made in the Company's Forms 10-Q filed on August 8, 2013, November 7, 2013, May 8, 2014, August 7, 2014, November 6, 2014, May 6, 2015, August 6, 2015, November 5, 2015, May 5, 2016, August 4, 2016, November 4, 2016, and May 4, 2017 and Forms 10-K filed on March 1, 2013, February 27, 2014, February 24, 2015, February 20, 2016, and February 23, 2017 and for statements made in conference calls in which he participated during the Class Period, held on May 8, 2013, May 16, 2013, August 7, 2013, August 14, 2013, September 12, 2013, November 6, 2013, December 10, 2013, January 7, 2014, February 12, 2014, March 5, 2014, March 11, 2014, May 7, 2014, May 19, 2014, June 3, 2014, June 12, 2014, August 6, 2014, September 11, 2014, November 5, 2014, December 9, 2014, January 6, 2015, February 11, 2015, March 2, 2015, March 9, 2015, May 5, 2015, May 18, 2015, June 4, 2015, June 24, 2015, August 5, 2015, August 12, 2015, November 4, 2015, December 7, 2015, January 6, 2016, February 10, 2016, March 2, 2016, March 7, 2016, March 8, 2016, May 4, 2016, August 3, 2016, September 15, 2016, September 21, 2016, October 31, 2016, November 10, 2016, November 29, 2016, December 5, 2016, January 4, 2017, February 8, 2017, March 1, 2017, March 7, 2017, May 3, 2017, and May 22, 2017.
- (d) Defendant Cole: Defendant Cole is liable for the false and misleading statements and omissions made in the Company's Forms 10-Q filed on August 8, 2013, November 7, 2013, May 8, 2014, August 7, 2014, November 6, 2014, May 6, 2015, August 6, 2015, November 5, 2015, May 5, 2016, August 4, 2016, November 4, 2016, and May 4, 2017 and Forms 10-K filed on March 1, 2013, February 27, 2014, February 24, 2015, February 20, 2016, and February 23, 2017.

- (e) Defendant Puckett: Defendant Puckett is liable for the false and misleading statements and omissions made in conference calls in which she participated during the Class Period, held on: May 8, 2013, August 7, 2013, November 6, 2013, February 12, 2014, May 7, 2014, August 6, 2014, November 5, 2014, February 11, 2015, May 5, 2015, and August 5, 2015.
- (f) Defendant Douglas: Defendant Douglas is liable for the false and misleading statements and omissions made in conference calls in which he participated during the Class Period, held on: May 4, 2016, August 3, 2016, February 8, 2017, and May 3, 2017.
- (g) Defendants Post, Ewing, Cole, Puckett and Douglas are liable for all false statements made by other Defendants in conference calls in which they participated during the Class Period.

286. Defendants Post, Ewing, Cole, Puckett and Douglas, as senior officers of the Company, are liable as direct participants in the wrongs complained of herein. Through their high-ranking positions of control and authority as the most senior executive officers of CenturyLink, each of these Defendants was able to control, and did directly control, the content of the public statements disseminated by CenturyLink. Defendants Post, Ewing, Cole, Puckett and Douglas had direct involvement in the daily business of the Company and participated in the preparation and dissemination of CenturyLink's materially false and misleading statements set forth above.

287. The allegations in this Complaint establish a strong inference that Defendants Post, Ewing, Cole, Puckett and Douglas acted with scienter throughout the Class Period in that they had actual knowledge of the misrepresentations and omissions of material facts set forth herein, or acted with reckless disregard for the truth in that they failed to ascertain and disclose such facts. As demonstrated by Defendants' material misstatements and

omissions throughout the Class Period, if Defendants did not have actual knowledge of the misrepresentations and omissions alleged herein, they were reckless in failing to obtain such knowledge by recklessly refraining from taking those steps necessary to discover whether their statements were false or misleading, even though such facts were available.

288. Plaintiffs and the other members of the Class have suffered damages in that, in reliance on the integrity of the market in which the securities traded, they paid artificially inflated prices for CenturyLink common stock and other securities, which inflation was removed from the stock and other securities when the true facts became known. Plaintiffs and the other members of the Class would not have purchased CenturyLink common stock and other securities at the prices they paid, or at all, if they had been aware that the market price had been artificially inflated by Defendants' misleading statements.

289. By virtue of the foregoing, Defendants have violated Section 10(b) of the Exchange Act and Rule 10b-5 promulgated thereunder.

290. As a direct and proximate result of Defendants' wrongful conduct, Plaintiffs and the other members of the Class suffered damages in connection with their respective purchases of CenturyLink securities during the Class Period.

## **COUNT II**

### **FOR VIOLATIONS OF SECTION 20(a) OF THE EXCHANGE ACT (Against Defendants Post, Ewing, Cole, Puckett, Douglas and Bailey)**

291. Plaintiffs repeat and re-alleges each and every allegation set forth above as if fully set forth herein.

292. Defendants Post, Ewing, Cole, Puckett, Douglas and Bailey acted as controlling persons of CenturyLink within the meaning of Section 20(a) of the Exchange Act, as alleged herein.

293. By reasons of their high-level positions of control and authority as the Company's most senior officer and, in the case of Defendant Post, also as a CenturyLink director, the Executive Defendants had the power and authority to influence and control, and did influence and control, the decision-making and activities of the Company and its employees, and to cause the Company to engage in the wrongful conduct complained of herein. The Executive Defendants were able to and did influence and control, directly and indirectly, the content and dissemination of the public statements made by CenturyLink during the Class Period, thereby causing the dissemination of the false and misleading statements and omissions of material facts as alleged herein. The Executive Defendants were provided with or had unlimited access to copies of the Company's press releases, public filings and other statements alleged by Plaintiffs to be misleading prior to and/or shortly after these statements were issued and had the ability to prevent the issuance of the statements to be corrected.

294. In their capacities as CenturyLink's most senior corporate officers, and as more fully described above, the Executive Defendants had direct and supervisory involvement in the day-to-day operations of the Company and, therefore, are presumed to have had the power to control or influence the particular transactions giving rise to the securities law violations as alleged herein. Defendants Post, Ewing and Cole signed CenturyLink's SEC filings, and Defendants Post and Ewing signed CenturyLink's

Sarbanes-Oxley certifications, and were directly involved in providing false information and certifying and/or approving the false statements disseminated by CenturyLink during the Class Period.

295. In their capacities as CenturyLink's most senior corporate officers, and as more fully described above, the Executive Defendants had direct and supervisory involvement in the day-to-day operations of the Company and, therefore, are presumed to have had the power to control or influence the particular transactions giving rise to the securities law violations as alleged herein.

296. Defendants Post, Ewing and Cole signed CenturyLink's SEC filings, and Defendants Post and Ewing signed CenturyLink's Sarbanes-Oxley certifications, and were directly involved in providing false information and certifying and/or approving the false statements disseminated by CenturyLink during the Class Period.

297. Defendant Puckett served as CenturyLink's President, Global Markets, from November 1, 2014 until she left the Company on August 31, 2015. Prior to that, Puckett served as CenturyLink's President and COO from 2002 until July 2009, and as CenturyLink's Executive Vice President and Chief Operating Officer from July 2009 until November 1, 2014. From the beginning of the Class Period until her departure from the Company, Puckett was the Company's second-highest paid executive officer, was listed as one of CenturyLink's named executive officers in its proxy filings each year, and spoke frequently on the Company's conference calls. At CenturyLink, Puckett oversaw the Company's entire sales apparatus, including the Company's call centers, and was responsible for addressing this segment in the Company's investor presentations.

298. Defendant Douglas succeeded Puckett as the Company's President, Sales and Marketing, in February 2016. Defendant Post explained that Douglas was brought in to "driv[e] the ship" with respect to sales and revenue and, from the time he arrived until the end of the Class Period, Douglas was the second-highest-paid executive, after Post. Douglas spoke regularly on the Company's conference calls, particularly in connection with the Company's plans to improve sales and revenues.

299. Defendant Bailey worked for CenturyLink for over 25 years. During the Class Period, Bailey served as the Company's Senior Vice President and Treasurer, as the Senior Vice President of Operations with oversight over "all" of CenturyLink's region operations, as a Senior Vice President in an operations transformation role leading a "transformation, of how we operate the Company, how we serve the Company, bringing really a better customer experience at every touch point for our customers." Defendant Ewing explained that Bailey worked directly for Post and had a wide purview to study "all" of CenturyLink's processes.

300. Each of the Executive Defendants culpably participated in some meaningful sense in the fraud alleged herein. Defendants Post, Ewing, Cole, Puckett, Douglas and Bailey each acted with scienter, as set forth more fully in Section VII.

301. By virtue of their positions as controlling persons of CenturyLink and as a result of their own aforementioned conduct, Defendants Post, Ewing, Cole, Puckett, Douglas and Bailey together and individually, are liable pursuant to Section 20(a) of the Exchange Act, jointly and severally with, and to the same extent as the Company is liable under Section 10(b) of the Exchange Act and Rule 10b-5 promulgated thereunder.



#### **XIV. PRAYER FOR RELIEF**

**WHEREFORE**, Plaintiffs pray for relief and judgment as follows:

- (a) Declaring that this action is a proper class action and certifying Plaintiffs as class representatives under Rule 23 of the Federal Rules of Civil Procedure;
- (b) Awarding compensatory damages in favor of Plaintiffs and the other Class members against all Defendants, jointly and severally, for all damages sustained as a result of Defendants' wrongdoing, in an amount to be proven at trial, including interest thereon;
- (c) Awarding Plaintiffs and the other members of the Class their reasonable costs and expenses incurred in this action, including attorneys' fees and expert fees; and
- (d) Awarding such other and further relief as the Court may deem just and proper

#### **XV. JURY DEMAND**

Plaintiffs hereby demand a trial by jury.

Dated: Minneapolis, Minnesota  
June 25, 2018

**BERNSTEIN LITOWITZ BERGER &  
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behalf of the Oregon Public Employee  
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Trust U/A/D 02/19/2009*

**APPENDIX A: FALSE AND MISLEADING STATEMENTS CONCERNING REVENUE RESULTS**

<b><u>Reporting Period</u></b>	<b><u>Misleading Revenue Metrics</u></b>	<b><u>False and Misleading Statements</u></b>
FY 2012	<p>Regional Markets Segment Revenue: \$9.876 billion</p> <p>Regional Markets Segment Strategic Revenue: \$3.607 billion</p>	<p><u>2012 Form 10-K (March 1, 2013):</u></p> <p>Growth in strategic services revenues was [in part] due to increases in the number of broadband subscribers as well as volume increases in our facilities-based video.</p>
Q1 2013	<p>Consumer Segment Revenue: \$1.511 billion</p> <p>Consumer Segment Strategic Revenue: \$620 million.</p> <p>(Repeated in Form 8-K, Earnings Call, Form 10-Q)</p>	<p><u>Q1 2013 Form 8-K (May 8, 2013):</u></p> <p>The Consumer segment realized continued strategic revenue growth driven by increased high-speed Internet and CenturyLink® Prism™ TV subscribers.</p> <p><u>Q1 2013 Earnings Call (May 8, 2013):</u></p> <p><b>Post:</b> We achieved strong high speed Internet and Prism TV subscriber growth. And the focused investments we have made in our key strategic initiatives have positively contributed to strategic revenue growth, and continued to improve our top line revenue trend.</p> <p><b>Ewing:</b> Strategic revenue in the quarter increased [in part] due to growth in strategic products [including] high speed Internet [and] Prism TV.</p> <p><u>Q1 2013 Form 10-Q (May 10, 2013):</u></p> <p>The increase in [consumer] strategic services revenues is due primarily to volume increases in our facilities-based video and increases in the number of broadband subscribers.</p>
Q2 2013	<p>Consumer Segment Revenue: \$1.494 billion</p>	<p><u>Q2 2013 Form 8-K (August 7, 2013):</u></p>

<u>Reporting Period</u>	<u>Misleading Revenue Metrics</u>	<u>False and Misleading Statements</u>
	<p>Consumer Segment Strategic Revenue: \$628 million</p> <p>(Repeated in Form 8-K, Earnings Call, Form 10-Q)</p>	<p>The Consumer segment realized continued strategic revenue growth driven by year-over-year increased high-speed Internet and CenturyLink Prism TV subscribers.</p> <p><u>Q2 2013 Earnings Call (August 7, 2013):</u></p> <p><b>Post:</b> [S]trength in revenue from high speed internet . . . and Prism TV were . . . drivers of [strategic revenue] growth.</p> <p><b>Ewing:</b> Strategic revenue in the quarter increased to 48% of total revenue from 45% in the second quarter a year ago, due to growth in strategic products such as high speed internet . . . [and] Prism TV.</p> <p><u>Q2 2013 Form 10-Q (August 8, 2013):</u></p> <p>The increase in [consumer] strategic services revenues is due primarily to volume increases in our facilities-based video services and increases in the number of broadband subscribers, as well as from price increases on various services.</p>
Q3 2013	<p>Consumer Segment Revenue: \$1.503 billion</p> <p>Consumer Segment Strategic Revenue: \$644 million</p> <p>(Repeated in Form 8-K, Earnings Call, Form 10-Q)</p>	<p><u>Q3 2013 Form 8-K (November 6, 2013):</u></p> <p>The Consumer segment realized continued strategic revenue growth driven by increased high-speed Internet and CenturyLink Prism TV subscribers, along with price increases for selected services.</p> <p><u>Q3 2013 Earnings Call (November 6, 2013):</u></p> <p><b>Post:</b> Strengthened revenues from high speed internet . . . and Prism TV were . . . drivers of [strategic revenue] growth.</p> <p><b>Ewing:</b> Our strategic revenues in [the consumer] segment grew 6.8% year over year to \$644 million, driven by growth in high speed internet and Prism customers and price increases.</p>

<u>Reporting Period</u>	<u>Misleading Revenue Metrics</u>	<u>False and Misleading Statements</u>
		<p><u>Q3 2013 Form 10-Q (November 8, 2013):</u></p> <p>The increase in [consumer] strategic services revenues is due primarily to volume increases in our facilities-based video services and increases in the number of broadband subscribers, as well as from price increases on various services.</p> <p><u>UBS Conference (December 10, 2013):</u></p> <p><b>Ewing:</b> [B]asically, the consumer revenue uplift that we had in the third quarter was predominantly related to price increases.</p>
Q4 and FY 2013	<p><u>For Q4 2013:</u></p> <p>Consumer Segment Revenue: \$1.496 billion</p> <p>Consumer Segment Strategic Revenue: \$683 million</p> <p><u>For FY 2013:</u></p> <p>Consumer Segment Revenue: \$6.004 billion</p> <p>Consumer Segment Strategic Revenue: \$2.650 billion</p> <p>(Repeated in Form 8-K, Earnings Call, Form 10-K)</p>	<p><u>Q4 and FY 2013 8-K (February 12, 2014):</u></p> <p>CenturyLink achieved strong financial and operating results for the fourth quarter with operating revenues at the top end of our guidance range for the quarter, record Prism™ TV subscriber growth, [and] higher than anticipated high-speed Internet subscriber additions.</p> <p>The Consumer segment realized continued strategic revenue growth driven by increased high-speed Internet and CenturyLink Prism TV subscribers.</p> <p><u>Q4 and FY 2013 Earnings Call (February 12, 2014):</u></p> <p><b>Post:</b> [C]ontinued [core] revenue improvement was driven by nearly a \$400 million increase in strategic revenues, [in part] due to growth in broadband [and] Prism TV.</p> <p><b>Ewing:</b> Our strategic revenues in [the consumer] segment grew 7.7% year over year to \$683 million, driven by growth in high-speed Internet and Prism subscribers and the full-quarter impact of price increases.</p> <p><u>2013 Form 10-K (February 27, 2014):</u></p>

<u>Reporting Period</u>	<u>Misleading Revenue Metrics</u>	<u>False and Misleading Statements</u>
		The increase in [consumer] strategic services revenues is due primarily to volume increases in our facilities-based video services and increases in the number of broadband subscribers, as well as from price increases on various services.
Q1 2014	<p>Consumer Segment Revenue: \$1.509 billion</p> <p>Consumer Segment Strategic Revenue: \$702 million</p> <p>(Repeated in Form 8-K, Earnings Call, Form 10-Q)</p>	<p><u>Q1 2014 Form 8-K (May 7, 2014):</u></p> <p>CenturyLink generated strong first quarter financial and operating results, driven [in part] by . . . consumer demand for high-speed Internet and Prism TV services.</p> <p>The Consumer segment achieved strong strategic revenue growth driven by increased high-speed Internet and CenturyLink® Prism™ TV customers, price increases on certain products and lower customer churn.</p> <p><u>Q1 2014 Earnings Call (May 7, 2014):</u></p> <p><b>Post:</b> Consumer revenue grew sequentially and was nearly flat year over year, fueled by continued strength in high-speed internet and Prism TV customer growth, price increases, and improved churn.</p> <p><b>Ewing:</b> Strategic revenues in [the consumer] segment grew 8.8% year over year to \$702 million, driven by growth in high-speed internet, Prism customers, price increases, and improved churn.</p> <p><u>Q1 2014 Form 10-Q (May 9, 2014):</u></p> <p>The increase in [consumer] strategic services revenues is due primarily to volume increases in our facilities-based video services and increases in the number of broadband subscribers, as well as from price increases on various services.</p> <p><u>Morgan Stanley Conference (June 12, 2014):</u></p> <p><b>Ewing:</b> [O]ur revenue declined on a consolidated basis pro forma 5.6% in 2010. Last year, we reduced that decline to 1.5%. . . . The main drivers of the improving revenue</p>

<u>Reporting Period</u>	<u>Misleading Revenue Metrics</u>	<u>False and Misleading Statements</u>
		trends are related to the strategic revenue growth, which are primarily our products such as high-speed Internet [and] our Prism TV product for our consumers.
Q2 2014	<p>Consumer Segment Revenue: \$1.500 billion</p> <p>Consumer Segment Strategic Revenue: \$709 million</p> <p>(Repeated in Form 8-K, Earnings Call, Form 10-Q)</p>	<p><u>Q2 2014 Form 8-K (August 6, 2014):</u></p> <p>CenturyLink second quarter results reflect [among other things] solid consumer demand for Prism TV service and our continued mitigation of legacy revenue declines.</p> <p>The Consumer segment achieved year-over-year revenue growth driven by increased high-speed Internet and CenturyLink Prism TV customers and price increases on certain products.</p> <p><u>Q2 2014 Earnings Call (August 6, 2014):</u></p> <p><b>Ewing:</b> Strategic revenues in [the consumer] segment grew 8.6% year-over-year to \$709 million, driven by growth in high speed internet and Prism TV customers, price increases, and improved churn.</p> <p>[W]e did some price increases early part of this year, too, that benefited second quarter as well. . . . That's helping the revenue decline on the legacy.</p> <p><u>Q2 2014 Form 10-Q (August 7, 2014):</u></p> <p>The increase in [consumer] strategic services revenues . . . was due primarily to volume increases in our facilities-based video services and increases in the number of broadband subscribers, as well as from price increases on various services.</p>
Q3 2014	<p>Consumer Segment Revenue: \$1.491 billion</p> <p>Consumer Segment Strategic Revenue: \$712 million</p>	<p><u>Q3 2014 Form 8-K (November 5, 2014):</u></p> <p>The Consumer segment achieved strong year-over-year strategic revenue growth driven by increased high-speed Internet and CenturyLink® Prism™ TV customers.</p> <p><u>Q3 2014 Earnings Call (November 5, 2014):</u></p>

<u>Reporting Period</u>	<u>Misleading Revenue Metrics</u>	<u>False and Misleading Statements</u>
	(Repeated in Form 8-K, Earnings Call, Form 10-Q)	<p><b>Ewing:</b> Strategic revenues in [the consumer] segment grew 6.4% year-over-year to \$712 million driven by growth in high-speed Internet and Prism TV customers, price increases, and improved churn.</p> <p><u>Q3 2014 Form 10-Q (November 6, 2014):</u></p> <p>The increase in strategic services revenues . . . was due primarily to increases in the number of our facilities-based video customers and increases in the number of broadband subscribers, as well as from price increases on various services.</p>
Q4 and FY 2014	<p><u>For Q4 2014:</u></p> <p>Consumer Segment Revenue: \$1.494 billion</p> <p>Consumer Segment Strategic Revenue: \$727 million</p> <p><u>For FY 2014:</u></p> <p>Consumer Segment Revenue: \$5.994 billion</p> <p>Consumer Segment Strategic Revenue: \$2.850 billion</p> <p>(Repeated in Form 8-K, Earnings Call, Form 10-K)</p>	<p><u>Q4 and FY 2014 Form 8-K (February 11, 2015):</u></p> <p>The Consumer segment achieved strong year-over-year strategic revenue growth driven primarily by increased high-speed Internet and CenturyLink Prism TV customers.</p> <p><u>Q4 and FY 2014 Earnings Call (February 11, 2015):</u></p> <p><b>Post:</b> [CenturyLink's] continued revenue improvement was driven by a nearly \$380-million increase in strategic revenues, [in part] due to growth in . . . high-speed Internet [and] Prism TV.</p> <p><b>Ewing:</b> Strategic revenues in [the consumer] segment grew 6.4% year over year to \$727 million, driven [in part] by growth in high-speed Internet and Prism TV customers, price increases, [and] improved churn . . . Legacy revenues for the segment declined 5.7% for fourth quarter 2013, as access line and long-distance revenue declines were partially offset by select price increases.</p> <p><u>2014 Form 10-K (February 24, 2015):</u></p> <p>The increase in [consumer] strategic services revenues . . . was due primarily to increases in the number of our facilities-based video customers and increases in the number of broadband subscribers, as well as from price increases on various services.</p>



<u>Reporting Period</u>	<u>Misleading Revenue Metrics</u>	<u>False and Misleading Statements</u>
		<p><u>Deutsche Bank Conference (March 9, 2015):</u></p> <p>This continued improvement [in revenues] was driven by a nearly \$380 million increase in strategic revenues [in part] due to growth in . . . high-speed Internet [and] Prism TV . . . revenues.</p>
Q1 2015	<p>Consumer Segment Revenue: \$1.497 billion</p> <p>Consumer Segment Strategic Revenue: \$738 million</p> <p>(Repeated in Form 8-K, Earnings Call, Form 10-Q)</p>	<p><u>Q1 2015 Form 8-K (May 5, 2015):</u></p> <p>The Consumer segment achieved solid year-over-year strategic revenue growth driven primarily by increased high-speed Internet and CenturyLink Prism TV customers, along with select price increases.</p> <p><u>Q1 2015 Earnings Call (May 5, 2015):</u></p> <p><b>Ewing:</b> Strategic revenues in [the consumer] segment grew 5.1% year over year to \$738 million driven by growth in high-speed internet and Prism TV customers and select price adjustments. Legacy revenues for the consumer segment declined 6% from first quarter 2014 as access line and long-distance revenue declines were partially offset by select price adjustments.</p> <p><u>Q1 2015 Form 10-Q (May 6, 2015):</u></p> <p>The increase in [consumer] strategic services revenues was due primarily to increases in the number of our Prism TV customers and increases in the number of broadband subscribers, as well as from price increases on various services.</p>
Q2 2015	<p>Consumer Segment Revenue: \$1.502 billion</p> <p>Consumer Segment Strategic Revenue: \$758 million</p>	<p><u>Q2 2015 Form 8-K (August 5, 2015):</u></p> <p>The Consumer segment achieved strong year-over-year strategic revenue growth driven primarily by increased high-speed Internet and CenturyLink Prism TV customers, along with select price increases.</p> <p><u>Q2 2015 Earnings Call (August 6, 2015):</u></p>

<u>Reporting Period</u>	<u>Misleading Revenue Metrics</u>	<u>False and Misleading Statements</u>
	(Repeated in Form 8-K, Earnings Call, Form 10-Q)	<p><b>Ewing:</b> Strategic revenues in [the consumer] segment grew 6.9% year over year to \$758 million, driven by growth in high-speed Internet and Prism TV customers and select price increases. Legacy revenues for the consumer segment declined 5.8% from second-quarter 2014, as access line and long-distance revenue declines were partially offset by select price increases.</p> <p><u>Q2 2015 Form 10-Q (August 6, 2015):</u></p> <p>The increase in [consumer] strategic services revenues was primarily due to increases in the number of our Prism TV customers and increases in the number of broadband subscribers, as well as from price increases on various services.</p>
Q3 2015	<p>Consumer Segment Revenue: \$1.509 billion</p> <p>Consumer Segment Strategic Revenue: \$763 million</p> <p>(Repeated in Form 8-K, Earnings Call, Form 10-Q)</p>	<p><u>Q3 2015 Form 8-K (November 4, 2015):</u></p> <p>The Consumer segment achieved strong year-over-year strategic revenue growth driven primarily by increased high-speed Internet and CenturyLink Prism TV customers, along with higher ARPU.</p> <p><u>Q3 2015 Earnings Call (November 4, 2015):</u></p> <p><b>Ewing:</b> Strategic revenues in [the consumer] segment grew 7.2% year over year to \$763 million, driven by year-over-year growth in high-speed internet and Prism TV customers and higher average revenue per customer through select price increases and higher-value bundles.</p> <p><u>Q3 2015 Form 10-Q (November 5, 2015):</u></p> <p>The increase in [consumer] strategic services revenues was primarily due to increases in the number of high-speed Internet subscribers and increases in the number of our Prism TV customers, as well as from price increases on various services.</p> <p><u>UBS Conference (December 7, 2015):</u></p>

<u>Reporting Period</u>	<u>Misleading Revenue Metrics</u>	<u>False and Misleading Statements</u>
		<p><b>Ewing:</b> [I]f you look at the consumer side of the business, between the increase in revenues that we have seen from high-speed Internet as well as our Prism TV service and price increases, select price increases that we have done, we've been able to see real stable revenue on the consumer side.</p>
Q4 and FY 2015	<p><u>For Q4 2015:</u></p> <p>Consumer Segment Revenue: \$1.513 billion</p> <p>Consumer Segment Strategic Revenue: \$773 million</p> <p><u>For FY 2015:</u></p> <p>Consumer Segment Revenue: \$6.021 billion</p> <p>Consumer Segment Strategic Revenue: \$3.032 billion</p> <p>(Repeated in Form 8-K, Earnings Call, Form 10-K)</p>	<p><u>Q4 and FY 2015 Form 8-K (February 10, 2016):</u></p> <p>The Consumer segment achieved solid year-over-year revenue growth driven primarily by increased high-speed Internet and CenturyLink Prism TV revenues.</p> <p><u>Q4 and FY 2015 Earnings Call (February 10, 2016):</u></p> <p><b>Ewing:</b> Strategic revenues in [the consumer] segment grew 6.3% year-over-year, to \$773 million, driven by year-over-year growth in high-speed internet and Prism TV revenues. Legacy revenues for the Consumer segment declined only 3.4% from fourth quarter 2014, as access line and long-distance revenue declines were partially offset by select price increases.</p> <p><u>2015 Form 10-K (February 25, 2016):</u></p> <p>The increase in [consumer] strategic services revenues was [in part] due to growth in the number of high-speed Internet subscribers and increases in the number of Prism TV customers.</p>
Q1 2016	<p>Consumer Segment Revenue: \$1.509 billion</p> <p>Consumer Segment Strategic Revenue: \$763 million</p>	<p><u>Q1 2016 Form 8-K (May 4, 2016):</u></p> <p>The Consumer segment achieved solid year-over-year strategic revenue growth driven primarily by increased high-speed Internet and CenturyLink Prism TV revenues.</p> <p><u>Q1 2016 Earnings Call (May 4, 2016):</u></p>

<u>Reporting Period</u>	<u>Misleading Revenue Metrics</u>	<u>False and Misleading Statements</u>
	(Repeated in Form 8-K, Earnings Call, Form 10-Q)	<p><b>Ewing:</b> Strategic revenues in this segment grew 4.9% year-over-year to \$774 million, driven by year-over-year growth in high-speed internet and Prism TV revenues. Legacy revenues for the consumer segment declined 5.8% from first quarter 2015, as voice revenue declines were partially offset by select price increases.</p> <p><b>Douglas:</b> [O]ur ARPUs are consistent with what you'd see at an ARPU level in our competitors. And we see competition adding a lot of fees. And so, that's where there might be a little bit of a delta, but we're working through, and constantly monitoring what our competitors are doing in the marketplace, with regard to the average ARPUs in our business.</p> <p><u>Q1 2016 Form 10-Q (May 5, 2016):</u></p> <p>The increase in our [consumer] strategic services revenues was primarily due to high-speed internet rate increases resulting from various pricing initiatives and increases in the number of our Prism TV customers.</p>
Q2 2016	<p>Consumer Segment Revenue: \$1.494 billion</p> <p>Consumer Segment Strategic Revenue: \$800 million</p> <p>(Repeated in Form 8-K, Earnings Call, Form 10-Q)</p>	<p><u>Q2 2016 Form 8-K (August 3, 2016):</u></p> <p>Consumer segment revenues were \$1.49 billion, a decrease of 0.6% from second quarter 2015, primarily due to a decline in legacy voice revenues, which was partially offset by growth in broadband and Prism TV revenues.</p> <p><u>Q2 2016 Earnings Call (August 3, 2016):</u></p> <p><b>Ewing:</b> Strategic revenues in [the consumer] segment grew 5.5% year-over-year to \$800 million, driven by year-over-year growth in broadband and Prism TV revenues. Legacy revenues for the consumer segment declined 6.8% from second quarter a year ago, as access line declines were partially offset by select price increases.</p> <p><u>Q2 2016 Form 10-Q (August 4, 2016):</u></p>

<u>Reporting Period</u>	<u>Misleading Revenue Metrics</u>	<u>False and Misleading Statements</u>
		The increase in our [consumer] strategic services revenues . . . was primarily due to rate increases resulting from various pricing initiatives on broadband, Prism TV and other strategic products and services, and increases in the number of our Prism TV customers.
Q3 2016	<p>Consumer Segment Revenue: \$1.472 billion</p> <p>Consumer Segment Strategic Revenue: \$789 million</p> <p>(Repeated in Form 8-K, Earnings Call, Form 10-Q)</p>	<p><u>Q3 2016 Form 8-K (October 31, 2016):</u></p> <p>Consumer segment revenues were \$1.47 billion, a decrease of 2.5% from third quarter 2015, primarily due to a decline in legacy voice revenues, which was partially offset by growth in broadband and Prism TV revenues.</p> <p><u>Q3 2016 Earnings Call (October 31, 2016):</u></p> <p><b>Ewing:</b> Strategic revenues in this segment grew 3.4% year-over-year to \$789 million driven by year-over-year growth in broadband and Prism TV revenues.</p> <p><u>Q3 2016 Form 10-Q (November 4, 2016):</u></p> <p>The decrease in our consumer segment revenues . . . was primarily due to the declines in our legacy services revenues, which were partially offset by increases in our strategic services revenues. . . . The increase in our strategic services revenues . . . was primarily due to rate increases resulting from various pricing initiatives on broadband, Prism TV and other strategic products and services, and increases in the number of our Prism TV customers, which were partially offset by a decline in broadband customers.</p>
Q4 and FY 2016	<p><u>For Q4 2016:</u></p> <p>Consumer Segment Revenue: \$1.448 billion</p> <p>Consumer Segment Strategic Revenue: \$784 million</p>	<p><u>Q4 and FY 2016 Form 8-K (February 8, 2017):</u></p> <p>Consumer segment revenues were \$1.45 billion, a decrease of 4.3% from fourth quarter 2015, primarily due to a decline in legacy voice revenues, which was partially offset by growth in Prism TM TV revenues. Strategic revenues were \$784 million in the quarter, a 1.4% increase over fourth quarter 2015.</p> <p><u>Q4 and FY 2016 Earnings Call (February 8, 2017):</u></p>

<u>Reporting Period</u>	<u>Misleading Revenue Metrics</u>	<u>False and Misleading Statements</u>
	<p><u>For FY 2016:</u></p> <p>Consumer Segment Revenue: \$5.903 billion</p> <p>Consumer Segment Strategic Revenue: \$3.147 billion</p> <p>(Repeated in Form 8-K, Earnings Call, Form 10-K)</p>	<p><b>Ewing:</b> [T]he consumer segment . . . generated \$1.45 billion in total operating revenues, a decline of 4.3% from fourth quarter 2015. Strategic revenues in the segment grew 1.4% year-over-year to \$784 million, driven by year-over-year growth in Prism TV revenues.</p> <p><u>2016 Form 10-K (February 23, 2017):</u></p> <p>The decrease in our consumer segment revenues was primarily due to the declines in our legacy services revenues, which were partially offset by increases in our strategic revenues. . . . The increase in our strategic services revenues was primarily due to 2016 rate increases resulting from various pricing initiatives on broadband, Prism TV and other strategic products and services, and increases in the number of our Prism TV customers.</p>
Q1 2017	<p>Consumer Segment Revenue: \$1.412 billion</p> <p>Consumer Segment Strategic Revenue: \$764 million</p> <p>(Repeated in Form 8-K, Earnings Call, Form 10-Q)</p>	<p><u>Q1 2017 Earnings Call (May 3, 2017):</u></p> <p><b>Post:</b> [C]onsumer broadband subscriber trends have been improving the last several quarters and improved again this quarter.</p> <p>Our focus has been on managing these legacy service revenues and related cost within for the cash flows they provide, enabling us to invest in our strategic services -- service offerings and effectively compete in today's marketplace. We believe the decline in our legacy revenues has been better than most of our peers and we will continue to manage these revenue streams to drive cash flows to invest in strategic services that meet the needs of the Enterprise and Consumer customers.</p>

**CERTIFICATION PURSUANT TO  
THE FEDERAL SECURITIES LAWS**

I, Brian de Haan, on behalf of Lead Plaintiff Oregon Public Employees Retirement Fund (“Oregon PERS”) hereby certify, as to the claims asserted under the federal securities laws, that:

1. I am an Assistant Attorney General in the Oregon Department of Justice’s Financial Fraud and Consumer Protection Section, and I am authorized to make legal decisions on behalf of Oregon PERS. I have reviewed the Consolidated Securities Class Action Complaint in this matter and authorize its filing by counsel.
2. Oregon PERS did not purchase the securities that are the subject of this action at the direction of counsel or in order to participate in any action arising under the federal securities laws.
3. Oregon PERS fully understands the duties and responsibilities of the lead plaintiff under the Private Securities Litigation Reform Act, including the selection and retention of counsel and overseeing the prosecution of the action for the Class.
4. Oregon PERS’ transactions in the CenturyLink, Inc. securities that are the subject of this action are set forth in the chart attached hereto.
5. Oregon PERS has sought to serve and was appointed as a lead plaintiff and representative party on behalf of a class in the following action under the federal securities laws filed during the three-year period preceding the date of this Certification:

*Craig v. CenturyLink, Inc.*, No. 17-cv-1005 (W.D. La.)

6. Oregon PERS has sought to serve as a lead plaintiff and representative party on behalf of a class in the following actions under the federal securities laws filed during the three-year period preceding the date of this Certification, but either withdrew its motions for lead plaintiff or was not appointed lead plaintiff:

*Hefler v. Wells Fargo & Company*, No. 16-cv-5479 (N.D. Cal.)

*Ontario Teachers’ Pension Plan Board v.*

*Teva Pharmaceutical Industries Limited*, No. 17-cv-558 (D. Conn.)

7. Oregon PERS will not accept any payment for serving as a representative party on behalf of the Class beyond Oregon PERS' pro rata share of any recovery, except such reasonable costs and expenses (including lost wages) directly relating to the representation of the Class, as ordered or approved by the Court.

I declare under penalty of perjury that the foregoing is true and correct. Executed this 12 day of June, 2018.



---

Brian de Haan  
Assistant Attorney General  
Oregon Department of Justice  
*Oregon Public Employees Retirement Fund*



**Oregon Public Employees Retirement Fund**  
**Transactions in CenturyLink, Inc. (CTL)**  
**Common Stock, Cusip # 156700106**

<u>Transaction</u>	<u>Date</u>	<u>Shares</u>	<u>Price</u>
Purchase	3/1/2013	232	34.6316
Purchase	4/3/2013	1,550	35.2429
Purchase	5/7/2013	1,700	36.9332
Purchase	5/10/2013	1,650	37.6635
Purchase	5/31/2013	300	35.2733
Purchase	6/12/2013	215	35.5250
Purchase	7/1/2013	3,700	35.3024
Purchase	7/11/2013	125	35.7820
Purchase	7/18/2013	300	35.7100
Purchase	8/12/2013	71	34.1200
Purchase	8/29/2013	63	33.0900
Purchase	10/4/2013	4,000	31.1229
Purchase	11/4/2013	100	33.6900
Purchase	11/7/2013	100	31.9400
Purchase	12/3/2013	500	30.2260
Purchase	12/19/2013	18,850	31.1006
Purchase	1/17/2014	4,800	30.2497
Purchase	2/6/2014	100	28.1600
Purchase	2/7/2014	100	28.4800
Purchase	3/18/2014	98,800	30.9687
Purchase	5/13/2014	40,610	36.8675
Purchase	5/14/2014	42,750	37.5743
Purchase	5/15/2014	13,440	37.8366
Purchase	6/9/2014	5,900	36.9097
Purchase	6/9/2014	200	36.9299
Purchase	6/10/2014	5,510	36.9350
Purchase	6/10/2014	29,750	36.9142
Purchase	6/11/2014	28,140	36.5107
Purchase	6/12/2014	1700	36.2933
Purchase	7/3/2014	100	36.0900
Purchase	7/7/2014	5,000	36.1638
Purchase	7/22/2014	100	37.2900
Purchase	10/21/2014	49,728	39.7282
Purchase	10/22/2014	21,313	40.1187
Purchase	10/31/2014	200	41.6900
Purchase	11/10/2014	4,100	39.6945
Purchase	12/5/2014	100	39.7742
Purchase	12/5/2014	139	39.7742
Purchase	1/8/2015	400	38.9600
Purchase	1/29/2015	3,400	37.6011
Purchase	1/30/2015	100	36.9198
Purchase	2/24/2015	200	36.9299
Purchase	3/10/2015	200	35.1900
Purchase	3/10/2015	100	35.1800

**Oregon Public Employees Retirement Fund**  
**Transactions in CenturyLink, Inc. (CTL)**  
**Common Stock, Cusip # 156700106**

<u>Transaction</u>	<u>Date</u>	<u>Shares</u>	<u>Price</u>
Purchase	3/12/2015	100	35.2800
Purchase	3/17/2015	12,680	34.8816
Purchase	5/6/2015	5,000	34.6754
Purchase	6/2/2015	2,400	32.9146
Purchase	6/5/2015	90,413	32.3497
Purchase	6/5/2015	300	32.3900
Purchase	6/12/2015	37,286	32.7768
Purchase	6/15/2015	100	32.2500
Purchase	7/1/2015	8,400	29.5170
Purchase	7/28/2015	200	28.2925
Purchase	8/6/2015	200	27.7450
Purchase	8/13/2015	22,360	27.9762
Purchase	8/14/2015	1,000	28.2200
Purchase	8/17/2015	1,600	28.3800
Purchase	8/18/2015	11,000	28.2158
Purchase	8/19/2015	48,445	28.3428
Purchase	8/20/2015	16,508	28.0053
Purchase	8/21/2015	8,439	27.3827
Purchase	9/1/2015	100	26.0500
Purchase	9/23/2015	319	25.1706
Purchase	9/25/2015	100	25.2750
Purchase	10/6/2015	400	25.5950
Purchase	10/21/2015	9,352	27.3525
Purchase	10/23/2015	16,931	27.9999
Purchase	11/25/2015	13,300	27.0899
Purchase	12/10/2015	3,700	26.4920
Purchase	12/17/2015	36,436	25.7619
Purchase	2/10/2016	305	24.8700
Purchase	3/21/2016	20,200	31.6114
Purchase	5/3/2016	14,466	30.5009
Purchase	5/5/2016	1,200	28.7299
Purchase	5/5/2016	2,200	28.8900
Purchase	5/11/2016	1,051	28.4716
Purchase	5/12/2016	29,034	28.4037
Purchase	5/13/2016	8,733	28.3854
Purchase	6/15/2016	6,749	27.7361
Purchase	6/16/2016	19,930	27.2314
Purchase	6/30/2016	7,319	28.9487
Purchase	7/11/2016	6,358	30.3448
Purchase	7/12/2016	16,300	30.7821
Purchase	7/19/2016	336	30.4144
Purchase	7/20/2016	1,845	30.3049
Purchase	7/29/2016	29,364	31.3237
Purchase	8/29/2016	500	28.6900

**Oregon Public Employees Retirement Fund**  
**Transactions in CenturyLink, Inc. (CTL)**  
**Common Stock, Cusip # 156700106**

<u>Transaction</u>	<u>Date</u>	<u>Shares</u>	<u>Price</u>
Purchase	8/31/2016	7,317	27.8000
Purchase	9/26/2016	1,252	27.3692
Purchase	9/26/2016	292	27.3467
Purchase	9/29/2016	322	27.4231
Purchase	10/21/2016	147	28.1550
Purchase	11/14/2016	500	24.2690
Purchase	11/21/2016	320	25.3100
Purchase	12/13/2016	14,353	24.4300
Purchase	12/15/2016	205,492	23.7655
Purchase	2/6/2017	5,600	25.0500
Purchase	2/9/2017	800	24.4875
Purchase	2/17/2017	4,121	24.2800
Purchase	3/27/2017	1,100	22.4600
Purchase	4/13/2017	15,128	25.1200
Sale	3/5/2013	(140)	35.3391
Sale	4/15/2013	(9,965)	36.7962
Sale	4/15/2013	(5,850)	36.5550
Sale	9/10/2013	(950)	32.4853
Sale	10/10/2013	(2,000)	33.0748
Sale	11/20/2013	(300)	32.2500
Sale	2/14/2014	(700)	30.8707
Sale	3/27/2014	(200)	32.4650
Sale	3/28/2014	(100)	32.6300
Sale	3/28/2014	(100)	32.6350
Sale	4/11/2014	(900)	33.4866
Sale	6/6/2014	(2,500)	37.0072
Sale	7/7/2014	(100)	36.0700
Sale	7/8/2014	(200)	36.5100
Sale	12/1/2014	(200)	41.3100
Sale	7/8/2015	(66,620)	29.8650
Sale	7/15/2015	(27,590)	29.5605
Sale	7/16/2015	(25,360)	30.3217
Sale	7/22/2015	(17,890)	29.2628
Sale	7/23/2015	(77,850)	29.0194
Sale	7/23/2015	(6,160)	29.0450
Sale	7/24/2015	(28,780)	28.2758
Sale	7/27/2015	(10,450)	28.0802
Sale	2/5/2016	(500)	26.9600
Sale	9/21/2016	(74,600)	26.8830
Sale	2/1/2017	(2,002)	26.0217
Sale	2/8/2017	(69,583)	24.3824
Sale	2/14/2017	(46,033)	24.5204
Sale	2/21/2017	(1,236)	24.5418

**Oregon Public Employees Retirement Fund**  
**Transactions in CenturyLink, Inc. (CTL)**  
**Common Stock, Cusip # 156700106**

<u>Transaction</u>	<u>Date</u>	<u>Shares</u>	<u>Price</u>
Sale	2/22/2017	(2,885)	24.8108
Sale	3/7/2017	(61,600)	22.9237
Sale	3/9/2017	(10,156)	22.7029
Sale	3/10/2017	(30,471)	23.1038
Sale	4/19/2017	(15,128)	25.2181
Sale	6/8/2017	(700)	25.9679

**Oregon Public Employees Retirement Fund**  
**Transactions in CenturyLink, Inc. (CTL)**  
**CenturyLink 5.625% Senior Notes Due 2020**  
**Cusip # 912920AC9**

<u>Transaction</u>	<u>Date</u>	<u>Units</u>	<u>Par Value</u>
Sale	12/18/2013	(1,395,000)	95.4580

**Oregon Public Employees Retirement Fund**  
**Transactions in CenturyLink, Inc. (CTL)**  
**CenturyLink 6.875% Senior Notes Due 2033**  
**Cusip # 156700AW6**

<u>Transaction</u>	<u>Date</u>	<u>Units</u>	<u>Par Value</u>
Purchase	3/18/2013	2,420,000	100.0000
Purchase	3/18/2013	130,000	101.0000
Purchase	6/5/2013	1,485,000	101.2500
Sale	6/18/2013	(2,470,000)	103.5000
Sale	6/18/2013	(1,565,000)	103.5000

**CERTIFICATION PURSUANT TO  
THE FEDERAL SECURITIES LAWS**

I, Fernando Alberto Vildosola, as trustee of the AUFV Trust U/A/D 02/19/2009, hereby certify, as to the claims asserted under the federal securities laws, that:

1. I have reviewed the Consolidated Securities Class Action Complaint in this matter and authorize its filing by counsel.
2. The securities that are the subject of this action were not purchased at the direction of counsel or in order to participate in any action arising under the federal securities laws.
3. I am willing to serve as a representative party on behalf of the Class, including providing testimony at deposition and trial, if necessary.
4. The transactions of AUFV Trust U/A/D 02/19/2009 in the CenturyLink, Inc. securities that are the subject of this action are set forth in the chart attached hereto.
5. I have not sought to serve as a lead plaintiff or representative party on behalf of a class in any action under the federal securities laws filed during the three-year period preceding the date of this Certification.
6. I will not accept any payment for serving as a representative party on behalf of the Class beyond my pro rata share of any recovery, except such reasonable costs and expenses (including lost wages) directly relating to the representation of the Class, as ordered or approved by the Court.

I declare under penalty of perjury that the foregoing is true and correct. Executed this 20 day of June, 2018.



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Fernando Alberto Vildosola, Trustee  
AUFV Trust U/A/D 02/19/2009

**Transactions in CenturyLink, Inc. (CTL)  
CenturyLink 7.60% Senior Notes Due 2039  
Cusip # 156700AM8**

<b><u>Transaction</u></b>	<b><u>Date</u></b>	<b><u>Units</u></b>	<b><u>Par Value</u></b>
Purchase	1/30/2015	30,000	102.5000

# Exhibit 2

**UNITED STATES DISTRICT COURT  
DISTRICT OF MINNESOTA**

IN RE: CENTURYLINK SALES  
PRACTICES AND SECURITIES  
LITIGATION

MDL No. 17-2795 (MJD/KMM)

This Document Relates to:  
Civil File No. 18-296 (MJD/KMM)

**MEMORANDUM OF LAW IN SUPPORT OF PLAINTIFFS' MOTION FOR  
CLASS CERTIFICATION AND APPOINTMENT OF CLASS  
REPRESENTATIVES AND CLASS COUNSEL**



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Lead Plaintiff the State of Oregon by and through the Oregon State Treasurer and the Oregon Public Employee Retirement Board, on behalf of the Oregon Public Employee Retirement Fund (“Oregon”) and named plaintiff Fernando Alberto Vildosola, as trustee for the AUFV Trust U/A/D 02/19/2009 (“Vildosola,” and collectively with Lead Plaintiff, “Plaintiffs”), respectfully submit this memorandum of law in support of their motion pursuant to Fed. R. Civ. P. 23(a) and 23(b)(3) to certify this action as a class action and to appoint Plaintiffs as Class Representatives, and, pursuant to Fed. R. Civ. P. 23(g), to appoint Bernstein Litowitz Berger & Grossmann LLP (“Bernstein Litowitz”) and Stoll Stoll Berne Lokting & Shlachter P.C. (“Stoll Berne”) as Class Counsel.

## **I. PRELIMINARY STATEMENT**

This securities fraud class action against CenturyLink, Inc. (“CenturyLink” or the “Company”) and six of its senior officers arises out of Defendants’ years-long practice of routinely and systematically “cramming” customer accounts—misquoting prices and improperly billing customers fees and services they did not authorize—in order to create a false image of financial success. Defendants’ false and misleading statements to investors concealed these practices and the fact that CenturyLink’s purported financial results depended on them. Investors were significantly damaged when Defendants’ misconduct was revealed in a series of disclosures.

Courts in the Eighth Circuit have repeatedly held that “[c]lass actions are a particularly appropriate and desirable means to resolve claims based on the securities laws.” *Moorhead v. Merrill Lynch, Pierce, Fenner & Smith, Inc.*, 1989 WL 91110, at \*3 (D. Minn. May 24, 1989) (citation omitted). The Supreme Court has also consistently

recognized the importance of private securities class actions as an integral component in enforcing the federal securities laws. *See, e.g., Basic, Inc. v. Levinson*, 485 U.S. 224 (1988).

Through this motion, Plaintiffs seek to certify a class pursuant to Federal Rules of Civil Procedure 23(a) and 23(b)(3), consisting of:

all persons and entities that purchased or otherwise acquired publicly traded CenturyLink common stock or 7.60% Senior Notes due September 15, 2039, during the period between March 1, 2013 to July 12, 2017, inclusive (the “Class Period”), and who were damaged thereby (the “Class”).<sup>1</sup>

Certification is appropriate under Rule 23(a) if: “(1) the class is so numerous that joinder of all members is impracticable; (2) there are questions of law or fact common to the class; (3) the claims or defenses of the representative parties are typical of the claims or defenses of the class; and (4) the representative parties will fairly and adequately protect the interests of the class.” Fed. R. Civ. P. 23(a). In addition, certification is appropriate under Rule 23(b)(3) if “questions of law or fact common to class members predominate over any questions affecting only individual members,” and a class action is “superior to other available methods for fairly and efficiently adjudicating the controversy.” Fed. R.

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<sup>1</sup> The proposed Class excludes (i) Defendants; (ii) CenturyLink’s affiliates and subsidiaries; (iii) the officers and directors of CenturyLink and its subsidiaries and affiliates at all relevant times; (iv) members of the immediate family of any excluded person; (v) heirs, successors, and assigns of any excluded person or entity; and (vi) any entity in which any excluded person has or had a controlling interest. All references to the “Complaint” and to “¶\_\_” are to Plaintiffs’ Consolidated Securities Class Action Complaint filed June 25, 2018 (ECF No. 143), and all references to “ECF No. \_\_” are to the docket in *Craig v. CenturyLink, Inc.*, No. 18-296 (MJD/KMM). Unless otherwise noted, all internal citations and quotation marks have been omitted and emphasis added.

Civ. P. 23(b)(3). As discussed below, the proposed class readily satisfies these requirements.

Accordingly, Plaintiffs request certification of the Class defined above, the appointment of Plaintiffs as Class Representatives, and the appointment of Bernstein Litowitz and Stoll Berne as counsel for the Class.

## **II. STATEMENT OF FACTS**

### **A. Summary of Plaintiffs' Claims**

Defendants' secret, systemic practice of illegally "cramming" customer accounts continued for many years and affected millions of CenturyLink's customers. ¶¶ 44, 178.<sup>2</sup> According to numerous former employees and internal documents, CenturyLink's cramming practices were widespread, were "happening all the time, all day, every day" and "clearly occurring in every state" in which the Company does business. ¶¶ 65, 89, 107, 178. But Defendants never suggested the Company's billing practices could be called into question. To the contrary, Defendants told investors CenturyLink would never "place or record an order for our products and services for a customer without that customer's authorization"—a clear denial of any cramming practices. ¶ 15, 240.

Defendants instead claimed that CenturyLink's revenue growth was driven by its focus on excellent customer service, its "bundling" marketing strategy, its focus on

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<sup>2</sup> Defendants include CenturyLink, former CEO Glen F. Post, III; former CFO R. Steward Ewing, Jr.; former Controller David D. Cole; former Global Head of Sales Karen Puckett; former President, Sales and Marketing Dean J. Douglas; and former Treasurer G. Clay Bailey.



“customer needs,” and its faithfulness to CenturyLink’s Unifying Principles of “fairness, honesty and integrity” and Code of Conduct. ¶¶ 32, 40-42, 52-54, 60, 190-200. Defendants also repeatedly claimed that the Company met and exceeded the customer service standards and consumer protection regulations governing its business, and that noncompliance with these rules was only a hypothetical “risk.” ¶¶ 43, 52. Defendants’ representations were critical to investors in the face of a structural decline in wireline services, competition, and concerns about CenturyLink’s ability to generate sustainable cash flows needed to pay the Company’s dividend. ¶¶ 57, 61.

These statements, however, were false. In reality, CenturyLink drove revenues not through its bundling strategies or by focusing on customer needs but by: (1) adding services to customer accounts without authorization; (2) lying to customers about the prices they would be charged; and (3) misleading customers concerning material terms of their contracts. ¶¶ 63-64, 88-94. According to numerous witnesses, CenturyLink’s illegal practices were well-known and encouraged by CenturyLink’s senior management, who not only enforced “ridiculous” sales quotas that were impossible to meet but also actively instructed employees to engage in deceptive sales pitches. ¶¶ 67-108.

In 2014, CenturyLink’s senior leadership internally acknowledged the cramming practices at its call centers, and attempted to address them. ¶¶ 109-11. However, after instituting changes to performance metrics and eliminating quotas for sales employees, CenturyLink’s sales numbers declined drastically. ¶¶ 111-12. Unwilling to tolerate the drop in revenues, CenturyLink senior management quickly reverted to the prior model—and both cramming and CenturyLink revenues quickly returned to their prior levels. ¶ 112.

To conceal the fact that cramming was a significant driver of CenturyLink revenues—which had sharply declined in response to Defendants’ efforts to address cramming and rebounded after CenturyLink abandoned that effort—Defendants falsely attributed CenturyLink’s fluctuating revenues to benign causes, such as an organizational realignment, purported marketing efforts to attract “high-value customers” and pursuing “higher value bundled sales and select pricing increases.” ¶¶ 117-19.

After CenturyLink returned to form, its billing misconduct began to attract the attention of the news media and regulators. But even as complaints and investigations mounted, the Company refused fix its sales culture, and affirmatively denied allegations of improper conduct. In May 2016, following scores of complaints from Minnesota customers, the Minnesota Attorney General initiated an investigation that threatened to expose the truth. ¶¶ 142, 168. CenturyLink did everything it could to frustrate the investigation and keep its billing practices a secret, including by falsely denying the existence of documents that CenturyLink’s vendors “promptly” produced. ¶ 168.

The truth concerning CenturyLink’s deceptive sales practices and their financial impact was revealed in a subsequent series of disclosures. On June 16, 2017, *Bloomberg* published an article entitled “CenturyLink Is Accused of Running a Wells Fargo-Like Scheme,” which reported that a CenturyLink employee had filed a whistleblower complaint that detailed CenturyLink’s cramming practices. ¶ 152. As that report revealed, the whistleblower was terminated after bringing her concerns about cramming directly to CenturyLink management. ¶ 147. Additional news stories followed, including a June 19, 2017 *Bloomberg* report that noted that consumers all over the country had been impacted

by CenturyLink’s cramming, that additional actions had been filed, and that damages were significant. ¶ 158.

Last, on July 12, 2017, media outlets reported that the Minnesota Attorney General had filed a complaint against CenturyLink following a year-long investigation, citing extensive evidence detailing the Company’s fraudulent sales practices. ¶ 163. As a result of these disclosures, the price of CenturyLink’s securities declined in a statistically significant matter. ¶ 266.

### III. PROCEDURAL HISTORY

Defendants filed a motion to dismiss the Complaint, which was denied in full on July 30, 2019. *See In re CenturyLink Sales Practices and Sec. Litig.*, 403 F. Supp. 3d 712 (D. Minn. 2019). Since then, Plaintiffs and their counsel have vigorously pursued discovery, consulted with numerous experts, and otherwise worked to develop the record supporting the claims of the Class. Beginning in December 2019, CenturyLink began to disclose that it would pay tens of millions of dollars—including to the State of Minnesota—to resolve numerous Attorney General investigations and proceedings into the very billing misconduct at issue here.

### IV. LEGAL STANDARDS

The U.S. Supreme Court has long recognized that private securities class actions serve as a “necessary supplement to [SEC] action,” by affording relief to those injured by securities laws violations and deterring wrongdoing. *J.I. Case Co. v. Borak*, 377 U.S. 426, 432 (1964); *see also Basic Inc.*, 485 U.S. at 231 (noting that securities class actions “constitute[] an essential tool for enforcement of the 1934 Act’s requirements”).

Consistent with this well-established authority, courts in the Eighth Circuit and across the country have repeatedly held that “[c]lass actions are a particularly appropriate and desirable means to resolve claims based on the securities laws.” *Moorhead*, 1989 WL 91110, at \*3.

Whether an action should be certified as a class action is governed by Rule 23, which requires Plaintiffs to demonstrate “numerosity,” “commonality,” “typicality,” and “adequacy of representation” under Rule 23(a), and “predominance” and “superiority” under Rule 23(b). *Rattray v. Woodbury Cty., IA*, 614 F.3d 831, 835 (8th Cir. 2010). At this stage, merits questions may be “considered to the extent – but only to the extent – that they are relevant to determining whether the Rule 23 prerequisites for class certification are satisfied.” *Amgen Inc. v. Conn. Ret. Plans and Trust Funds*, 568 U.S. 445, 465-66 (2013).

The Court has “broad discretion to decide whether certification is appropriate,” *Prof’l Firefighters Ass’n of Omaha, Local 385 v. Zalewski*, 678 F.3d 640, 645 (8th Cir. 2012), and “the substantive allegations in the plaintiff’s complaint are accepted as true when determining if the proposed class is acceptable.” *In re Potash Antitrust Litig.*, 159 F.R.D. 682, 688 (D. Minn. 1995). “When there is a question as to whether certification is appropriate, the Court should give the benefit of the doubt to approving the Class.” *Kimball v. Frederick J. Hanna & Assoc., P.C.*, 2011 WL 3610129, at \*3 (D. Minn. Aug. 15, 2011) (Davis, J.). As discussed below, Plaintiffs amply satisfy Rule 23’s requirements.

## V. THE CLASS SATISFIES RULE 23(A)'S PREREQUISITES

### A. Numerosity Is Satisfied

“Courts generally assume that the numerosity requirement is satisfied in class actions involving nationally traded securities.” *In re SciMed Sec. Litig.*, 1993 WL 616692, at \* 3 (D. Minn. Sept 29, 1993). While “[t]here is no absolute number that satisfies the numerosity requirement,” a proposed class with approximately 40 members has been found to satisfy the numerosity requirement. *Lockwood Motors, Inc. v. Gen. Motors Corp.*, 162 F.R.D. 569, 574 (D. Minn. 1995) (quoting 3B Moore’s Federal Practice ¶ 23.05[1] at 23-143-45 (2d ed. 1995)).

Here, the numerosity requirement is met because: (1) CenturyLink’s common shares were actively traded on the New York Stock exchange during the Class Period; (2) CenturyLink had approximately 567 million shares of common stock issued and outstanding on average during Class Period; (3) CenturyLink’s common stock traded at a weekly average of over 28.7 million shares, with an average weekly turnover of 5.1%; (4) CenturyLink’s publicly traded bonds, including the 7.60% Senior Notes, were actively traded on open, well-developed and efficient markets; and (5) CenturyLink’s 7.60% Senior Notes had an amount outstanding of \$800 million at the end of the Class Period, and were held by at least 120 institutional investors (and likely by hundreds, if not thousands, of other investors). Hartzmark Report (Ex. C to the Blatchley Decl.), ¶¶ 99, 105, 128, Exs. I, XI. This more than meets the numerosity requirement. *See, e.g., Beaver Cty. Emps.’ Ret. Fund v. Tile Shop Holdings, Inc.*, 2016 WL 4098741, at \*3 (D. Minn. July 28, 2016) (class

met numerosity requirement where 5.175 million shares of stock were sold in public offering).<sup>3</sup>

## **B. Commonality Is Satisfied**

Commonality is easily satisfied in securities cases. *See GenesisIntermedia*, 232 F.R.D. at 328 (commonality satisfied where common legal theory – *i.e.*, violations of federal securities laws – is linked to a common group – *i.e.*, securities purchasers). Where “the documents and public reports at issue were uniform and broadly distributed...there are...several issues of fact common to members of the proposed Plaintiff class.” *In re SciMed Sec. Litig.*, 1993 WL 616692, at \*3. In fact, “questions of misrepresentation, materiality and scienter are the paradigmatic common question[s] of law or fact.” *In re DaimlerChrysler AG Sec. Litig.*, 216 F.R.D. 291, 296 (D. Del. 2003); *see also In re Charter Commc’ns, Inc., Sec. Litig.*, 2005 WL 4045741, at \*11 (E.D. Mo. June 30, 2005) (“Courts repeatedly have held that common questions regarding defendants’ liability are appropriate for class-wide treatment, even if there are individual differences in Class members’ damages.”).

Here, there are numerous common questions of law and fact, including: (a) whether Defendants’ misrepresentations and omissions violated the federal securities laws; (b)

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<sup>3</sup> *See also In re GenesisIntermedia, Inc. Sec. Litig.*, 232 F.R.D. 321, 328 (D. Minn. 2005) (numerosity satisfied where 380,000 shares traded per day during class period and more than 23 million shares of stock were outstanding); *Bennett v. Sprint Nextel Corp.*, 298 F.R.D. 498, 505 (D. Kan. 2014) (citing threshold of 20-50 class members and finding that class of bondholders including 224 institutional investors met numerosity requirement); *AAL High Yield Bond Fund v. Ruttenberg*, 229 F.R.D. 676, 684 (N.D. Ala. 2005) (class of at least 80 bondholders met numerosity requirement).

whether Defendants misrepresented material facts about CenturyLink's billing practices and financial performance during the Class Period; (c) whether Defendants are liable for the alleged misrepresentations and omissions described herein; (d) whether Defendants' misrepresentations and omissions caused the Class members to suffer a compensable loss; and (e) whether Class members have sustained damages, and the proper measure of damages. ¶ 271. As any one of these common questions would suffice, Plaintiffs meet the commonality requirement.

### **C. Typicality Is Satisfied**

"The burden of demonstrating typicality is fairly easily met so long as other class members have claims similar to the named plaintiff." *DeBoer v. Mellon Mortg. Co.*, 64 F.3d 1171, 1174 (8th Cir. 1995). "Factual variations in the individual claims will not normally preclude class certification if the claim arises from the same event or course of conduct as the class claims, and gives rise to the same legal or remedial theory." *Alpern v. UtiliCorp United, Inc.*, 84 F.3d 1525, 1540 (8th Cir. 1996).

Like all other Class members, Oregon and the Vildosola purchased CenturyLink's publicly traded securities during the Class Period at prices artificially inflated by Defendants' misrepresentations and omissions. ¶¶ 26-27, 270. In addition, Plaintiffs, like all other Class members, were subsequently damaged when the price of CenturyLink's publicly traded securities declined after the truth of Defendants' fraud was revealed. ¶¶ 26-27, 270. Because the proposed Class Representatives have claims that are typical of the claims of the Class, bring claims under the same federal securities law and seek the same relief as other Class members, the typicality requirement is satisfied.

#### **D. Adequacy Is Satisfied**

Plaintiffs more than satisfy the adequacy requirement of Rule 23(a)(4), which asks: “(1) whether the class representatives have common interests with the members of the class, and (2) whether the class representatives will vigorously prosecute the interests of the class through qualified counsel.” *In re Retek Inc. Sec. Litig.*, 236 F.R.D. 431, 435 (D. Minn. 2006). Plaintiffs readily satisfy both prongs of that standard.

First, Oregon—an institutional investor that provides retirement benefits to Oregon’s public employees—purchased CenturyLink securities during the Class Period at prices artificially inflated by Defendants’ misrepresentations and omissions, and suffered significant damages when the price of CenturyLink’s publicly traded securities declined when the truth was revealed. ¶¶ 26-27, 270. Plaintiff Vildosola similarly purchased CenturyLink’s 7.6% Notes during the Class Period and was damaged when the price of those securities declined in response to the alleged corrective disclosures. ¶¶ 26-27, 270.

Both Oregon and Vildosola have submitted sworn declarations attesting to their work on behalf of the Class, including through investigating and filing the consolidated complaint, defeating Defendants’ motion to dismiss, and vigorously pursuing the claims of the proposed class in discovery, including by retaining and consulting with experts and propounding and responding to document requests, third party subpoenas, and other discovery. *See* Declaration of Brian de Haan in Support of Plaintiffs’ Motion for Class Certification and Appointment of Class Representatives and Class Counsel (“De Haan Decl.”) (Ex. D to the Blatchley Decl.), ¶¶ 4-10; Declaration of Fernando Alberto Vildosola, as trustee for the AUFV Trust U/A/D 02/19/2009 in Support of Plaintiffs’ Motion for Class



Certification and Appointment of Class Representatives and Class Counsel (“Vildosola Decl.”) (Ex. E to the Blatchley Decl.), ¶¶ 4-10. Further, Plaintiffs have been diligently overseeing counsel’s efforts, frequently discuss case updates with counsel, and are committed to fulfilling their responsibility to maximize the recovery on behalf of the class. De Haan Decl., ¶¶ 8-9; Vildosola Decl., ¶¶ 8-9; Blatchley Decl., ¶ 2. In addition, the fact that Lead Plaintiff Oregon is an institutional shareholder that shares the Class’s common interests supports a finding of adequacy. *See* H.R. Rep. No. 104-369, 34 (1995) (Conf. Rep.), *reprinted in* 1995 U.S.C.A.N. 730, 733 (the Private Securities Litigation Reform Act of 1995 was enacted “to increase the likelihood that institutional investors will serve as lead plaintiffs.”).

Plaintiffs have also retained qualified counsel, further supporting a finding of adequacy. In appointing class counsel, the court must consider “(i) the work counsel has done in identifying or investigating potential claims in the action; (ii) counsel’s experience in handling class actions, other complex litigation, and the types of claims asserted in the action; (iii) counsel’s knowledge of the applicable law; and (iv) the resources that counsel will commit to representing the class.” Fed. R. Civ. P. 23(g)(1)(A).

Here, Oregon and Vilodola retained Bernstein Litowitz and Stoll Berne, two firms that are eminently qualified to represent the class in this case and have a wealth of experience and successfully prosecuting securities fraud actions. Bernstein Litowitz and Stoll Berne successfully litigated numerous motions before the Judicial Panel for Multidistrict Litigation, defeated Defendants’ motion to dismiss, negotiated a case schedule and ESI protocol, propounded discovery, pursued third-party subpoenas, and

have conducted significant work with experts to pursue the claims of the Class. Moreover, Bernstein Litowitz and Stoll Berne have substantial experience in securities class action litigation and have successfully prosecuted class actions in state and federal court, including in the District of Minnesota. Blatchley Decl., Exs. A, B. Since the inception of the litigation, Bernstein Litowitz and Stoll Berne have zealously represented the interests of the class, will continue to do so, and should be appointed Class Counsel under Rule 23(g).

## **VI. THE COURT SHOULD CERTIFY THE CLASS UNDER RULE 23(B)(3)**

### **A. Common Questions of Law And Fact Predominate**

According to the Supreme Court, “[p]redominance is a test readily met in certain cases alleging . . . securities fraud.” *Amchem Prod., Inc. v. Windsor*, 521 U.S. 591, 625 (1997); *see also Basic*, 485 U.S. 224. Moreover, “[c]ommon questions need only predominate; they need not be dispositive of the litigation.” *In re Potash Antitrust Litig.*, 159 F.R.D. at 693. “At the core of Rule 23(b)(3)’s predominance requirement is the issue of whether the defendant’s liability to all plaintiffs may be established with common evidence . . . . If the same evidence will suffice for each member to make a *prima facie* showing, then it becomes a common question.” *Sandusky Wellness Ctr., LLC v. Medtox Sci., Inc.*, 821 F.3d 992, 998 (8th Cir. 2016).

The predominance inquiry looks to the elements of the underlying causes of action. *Erica P. John Fund, Inc. v. Halliburton Co.*, 563 U.S. 804, 809-10 (2011) (“*Halliburton I*”). “That the defendant might attempt to pick off the occasional class member here or there through individualized rebuttal does not cause individual questions to predominate.”

*Halliburton Co. v. Erica P. John Fund, Inc.*, 573 U.S. 258, 276 (2014) (“*Halliburton I*”). Because the Supreme Court has held that falsity, materiality, and loss causation are common issues to a class, *Amgen*, 568 U.S. at 474-75, predominance in a securities fraud action often turns on the reliance element. *Halliburton I*, 563 U.S. at 810.

Plaintiffs are entitled to a presumption of classwide reliance under the fraud-on-the-market theory established in *Basic, Inc. v. Levinson*, 485 U.S. 224 (1988), and reaffirmed in *Halliburton II*. Under those precedents, Plaintiff may satisfy Section 10(b)’s reliance element by invoking a presumption that a public, material misrepresentation will distort the price of stock traded in an efficient market, and that anyone who purchases the stock at the market price may be considered to have done so in reliance on the misrepresentation. *Halliburton II*, 573 U.S. at 283-84. To invoke the *Basic* presumption, Plaintiff must establish that (1) the alleged misrepresentations were public; (2) the stock traded in an efficient market; and (3) the relevant transaction took place between the time the misrepresentations were made and the time the truth was revealed. *Halliburton I*, 563 U.S. at 811. As discussed below, the *Basic* standard is satisfied.

# **1. Plaintiffs Are Entitled To A Presumption Of Reliance Under The Fraud-On-The-Market Doctrine Because Market Efficiency Is Established**

The fraud-on-the-market presumption is based on the “fairly modest premise that market professionals generally consider most publicly announced material statements about companies;” therefore, “the market price of shares traded on well-developed markets reflects all publicly available information, and, hence, any material misrepresentations.”

*Halliburton II*, 573 U.S. at 258, 268. Thus, “a buyer of the security may be presumed to have relied on that information in purchasing the security.” *Amgen*, 568 U.S. at 458.

Plaintiffs are entitled to a presumption of reliance under *Basic*’s “fraud-on-the-market” theory because each of the prerequisites for the presumption—publicity, market timing, and market efficiency—are satisfied. On publicity, Plaintiffs allege that Defendants made material misrepresentations and omissions in their public statements to investors that artificially inflated or maintained the market price of CenturyLink’s securities. *See, e.g.*, ¶¶ 267-77. On market timing, Plaintiffs allege that they bought CenturyLink securities during the Class Period, and suffered losses when the artificial inflation came out of the price of those securities when the truth was disclosed. *Id.* Finally, as demonstrated below, CenturyLink stock and the 7.6% Notes traded in efficient markets.

As set forth in the Hartzmark Report, the markets for CenturyLink common stock and the 7.6% Senior Notes were efficient during the Class Period. Courts in the Eighth Circuit have relied on the factors outlined in *Cammer v. Bloom*, 711 F. Supp. 1264, 1286 (D.N.J. 1989) (“*Cammer*”) and *Krogman v. Sterritt*, 202 F.R.D. 467, 478 (N.D. Tex. 2001) (“*Krogman*”), to decide whether a market is efficient. *See Beaver Cty. Emps.’ Ret. Fund*, 2016 WL 4098741, at \*8-9 (analyzing the *Cammer* and *Krogman* factors); *Första AP-Fonden v. St. Jude Med., Inc.*, 312 F.R.D. 511, 518 (D. Minn. 2015) (same).

The *Cammer* factors address: “(1) a stock’s average weekly trading volume; (2) the number of security analysts following and reporting on the stock; (3) the extent to which market makers and arbitrageurs trade in the stock; (4) whether the company is eligible to file an SEC Form S-3; and (5) empirical facts showing a cause and effect relationship

between unexpected corporate events or financial releases and an immediate response in the stock price.” *Första AP-Fonden*, 312 F.R.D. at 518 (citing *Cammer*, 711 F. Supp. at 1286-87).

The *Krogman* factors are: “(6) the company’s market capitalization, (7) the bid-ask spread for stock sales, and (8) float (the percentage of shares held by the public, as opposed to insiders).” *Första AP-Fonden*, 312 F.R.D. at 518 (citing *Krogman*, 202 F.R.D. at 478). In addition, this Court has looked to other factors, such as whether a stock shows “autocorrelation,” which measures “how predictable a stock’s pricing is based on historical data,” absence of which is supportive of an efficient market, and whether a stock is traded on a major stock exchange. *Id.*

Dr. Hartzmark’s Report analyzes each of these factors and confirms that CenturyLink’s common stock and the 7.6% Senior Notes traded on efficient markets during the Class Period.

**a. CenturyLink Securities Traded on a National Securities Exchange**

Throughout the Class Period, CenturyLink’s common stock was traded on the New York Stock Exchange (“NYSE”), one of the most efficient securities markets in the world. Hartzmark Report, ¶¶ 23, 37-38. Courts have routinely held that securities listed on the NYSE trade in an efficient market. Hartzmark Report, ¶¶ 37-38; *see Cammer*, 711 F. Supp. at 1292 (“at a minimum, there should be a presumption...that certain markets are developed and efficient for virtually all the securities traded there: The New York and

American Stock Exchanges[.]”); *see also Första AP-Fonden*, 312 F.R.D. at 519 (stock trading on the NYSE weighed in favor of market efficiency).

Indeed, at least one court has noted it was “[un]able to locate a single case where the market for a NYSE-traded security was deemed inefficient,” holding that the fact that the security traded on the NYSE “strongly favors a finding of market efficiency.” *In re DVI Inc. Sec. Litig.*, 249 F.R.D. 196, 208 (E.D. Pa. 2008).

#### **b. Trading Volume**

An “[a]verage weekly trading volume of 2% or more of outstanding securities justifies a ‘strong presumption’ of an efficient market for that security.” *In re Winstar Commc’ns Sec. Litig.*, 290 F.R.D. 437, 447 (S.D.N.Y. 2013) (citing *Cammer*, 711 F. Supp. at 1286). The average weekly trading volume of the CenturyLink common stock was 27.8 million shares, or 4.9% of outstanding shares, Hartzmark Report, ¶ 25, Ex. I, which easily satisfies the first *Cammer* factor. *See Första AP-Fonden*, 312 F.R.D. at 519 (weekly trade volumes of at least four million shares, with 4.58% of shares outstanding, weighed in favor of market efficiency).

The 7.6% Senior Notes also had a high frequency of trading during the class period: the 7.6% Senior Notes had an average turnover rate of 2.5%, with a median of 1.8%, and traded on all possible trading days from the time it was issued during the Class Period. Hartzmark Report, ¶¶ 116-19; Exs. XI, XII; *see Winstar*, 290 F.R.D. at 447 (bond turnover over 2% justifies “strong presumption” of efficient market). In addition, the average trade size was large: the average dollar transaction size in par value for the 7.6% Senior Notes was \$97,735 during the Class Period. Hartzmark Report, ¶¶ 111-12. These volumes and

trade values support the conclusion that the market for CenturyLink common stock and the 7.6% Senior Notes was efficient.

**c. Analyst Coverage**

During the Class Period, more than 50 analysts covered CenturyLink, with an average of 19 analysts covering the Company per week. Hartzmark Report, ¶¶ 19, 31, 132; Ex. II. *See Första AP-Fonden*, 312 F.R.D. at 519 (coverage by 24 analysts weighed in favor of market efficiency). The number of analysts following CenturyLink was greater than at least 80% of the common stocks on the NYSE and NASDAQ. Hartzmark Report, ¶ 31. Analysts closely watched CenturyLink, publishing over 1,000 reports and actively participating on 17 conference calls during the Class Period. Hartzmark Report, ¶¶ 28-29; Exs. III-A, III-B; *see In re Retek Inc.*, 236 F.R.D. at 436-37 (that company was “subject of 244 analyst reports during the class period” weighed in favor of efficiency of market). As to the 7.6% Senior Notes, analysts such as Fitch and S&P Global issued numerous reports specifically addressing CenturyLink’s debt securities. Hartzmark Report, ¶ 122, 124. During the Class Period, analysts also hosted 38 investor conferences, and CenturyLink was discussed in approximately 11,500 published articles. Hartzmark Report, ¶¶ 29, 32; Ex. III-C; Appendix C. The heavy coverage of CenturyLink by analysts and the media weighs in favor of market efficiency.

**d. Market Makers And Arbitrageurs**

“The existence of market makers and arbitrageurs” is persuasive evidence of market efficiency because it “would ensure completion of the market mechanism; these individuals would react swiftly to company news and reported financial results by buying or selling

stock and driving it to a changed price level.” *Cammer*, 711 F. Supp. at 1286-87. CenturyLink’s common stock was actively traded on the NYSE by at least 1,668 institutional investors during the Class Period. Hartzmark Report, ¶¶ 39-40; Exs. IV, V. And there were opportunities for arbitrage throughout the Class Period, given that the amount of short interest in CenturyLink common stock ranged from 24.1 million shares to 114.9 million shares, with an average of 47.3 million shares. Hartzmark Report, ¶¶ 41-42; Ex. VI. Further, Dr. Hartzmark identified 343 separate market makers for the 7.6% Senior Notes during the Class Period. Hartzmark Report, ¶¶ 115, 126; Ex. XV; *In re Retek Inc. Sec. Litig.*, 236 F.R.D. at 436-37 (existence of 44 market makers weighed in favor of finding of market efficiency). And more than 120 institutional investors held at least 21-33% of the 7.6% Senior Notes at year-end from 2013 to 2016. Hartzmark Report, ¶ 128; Ex. XVI; *see Första AP-Fonden*, 312 F.R.D. at 519 (active trading by institutional investors, who held “large percentage” of stock, weighed in favor of market efficiency). These facts support the conclusion that CenturyLink common stock and the 7.6% Senior Notes traded on an efficient market.

#### **e. SEC Form S-3 Eligibility**

As explained in *Cammer*, eligibility to file an abbreviated SEC Form S-3, which is only available to issuers that have been filing reports under the Exchange Act for at least 12 months, have a public float of \$75 million, and meet certain other requirements, is highly probative of efficiency. 17 C.F.R. § 239.13; *see Cammer*, 711 F. Supp. at 1287 (“[I]t is the number of shares traded and value of shares outstanding that involve the facts which imply



efficiency.”). CenturyLink met these requirements, and, in fact, filed at least three Forms S-3 during the Class Period. Hartzmark Report, ¶¶ 43-45; 130-32.

**f. Causal Relationship Between Information and Stock Price**

Finally, Plaintiffs have “allege[d] empirical facts showing a cause and effect relationship between unexpected corporate events or financial releases and an immediate response in the stock price.” *Cammer*, 711 F. Supp at 1287. Here, Dr. Hartzmark examined the fifth *Cammer* factor by conducting an event study. ¶¶ 61-65; Apps. C, D. “Event studies are ‘regression analyses that seek to show that the market price of the defendant’s stock tends to respond to pertinent publicly reported events.’” *Första AP-Fonden*, 312 F.R.D. at 520 n.4 (quoting *Halliburton II*, 573 U.S. 280). Events studies are “considered *prima facie* evidence of the existence of this causal relationship.” *Winstar*, 290 F.R.D. at 448.

In the study, Dr. Hartzmark used generally accepted statistical methods to compare CenturyLink common stock price movements on “news” days to movements on “non-news” days. Hartzmark Report, ¶¶ 63-65; App. C. He found that CenturyLink common stock exhibited significant price movements more than nine times as frequently on news days than as on non-news days. Hartzmark Report, ¶¶ 74-75; App. E. Dr. Hartzmark also found there was no statistically significant autocorrelation of CenturyLink’s common stock abnormal returns, which is consistent with the conclusion that CenturyLink common stock reacts quickly to unexpected events. Hartzmark Report, ¶¶ 79-83; Ex. X. Finally, although not necessary to show market efficiency, Dr. Hartzmark reviewed CenturyLink common stock’s price movements in response to the alleged corrective disclosures alleged in the

Complaint, and found highly statistically significant price movements in response to each disclosure—which is consistent with a security that trades in an efficient market. Hartzmark Report, ¶¶ 84-88, Apps. C, E.

Dr. Hartzmark also employed an event study to analyze the cause and effect relationship between unexpected new information and CenturyLink’s 7.6% Senior Notes prices, and concluded that new CenturyLink-specific information and large price movements of the 7.6% Senior Notes were related and could not be attributed to outside influences. Hartzmark Report, ¶¶ 153-82. First, Dr. Hartzmark found that the 7.6% Senior Notes responded information about CenturyLink’s credit rating in a manner consistent with a finding of an efficient market. Hartzmark Report, ¶¶ 157-66; Ex. XIX. Second, Dr. Hartzmark examined the relationship between 7.60% Note price volatility and common stock volume—a proxy for CenturyLink-specific information—and found that the relationship was positive and highly statistically significant, which also supports a finding of market efficiency. Hartzmark Report, ¶¶ 167-70 Ex. XX. Third, Dr. Hartzmark determined that the 7.6% Note did not exhibit economically meaningful autocorrelation. Hartzmark Report ¶¶ 171-77. Finally, although not necessary to show market efficiency, Dr. Hartzmark reviewed the 7.60% Note’s response to the corrective disclosures and found that each was associated with significant price movement in the price of the Senior 7.6% Notes—another finding consistent with market efficiency. Hartzmark Report, ¶¶ 178-81; Ex. XXI.

These analyses support a finding of market efficiency for CenturyLink’s common stock and the 7.60% Notes during the Class Period. Hartzmark Report, ¶¶ 85-87, 182.

**g. Market Capitalization**

“Market capitalization, calculated as the number of shares multiplied by the prevailing share price, may be an indicator of market efficiency because there is a greater incentive for stock purchasers to invest in more highly capitalized corporations.” *Krogman*, 202 F.R.D. at 478. Throughout the Class Period, CenturyLink’s market capitalization averaged approximately \$17.9 billion, with a high of \$23.9 billion, meaning that CenturyLink’s market capitalization was generally greater than 89-95% of common stocks on the NYSE and NASDAQ. Hartzmark Report, ¶¶ 47-50; Ex. VII; *see Första AP-Fonden*, 312 F.R.D. at 519 (market capitalization in the “billions of dollars” weighed in favor of market efficiency). The 7.6% Senior Notes also had a high market value ranging from \$587 million to \$844 million during the class period. Hartzmark Report, ¶ 134; Exs. XIV, XVII; *In re HealthSouth Corp. Sec. Litig.*, 261 F.R.D. 616, 636 (N.D. Ala. 2009) (“For bonds, an analogous factor [to market capitalization] would be the total market value of the bonds calculated as the principal amount outstanding (face value) multiplied by the current price of the note.”). The high market capitalization and market value of the CenturyLink securities at issue supports a finding of market efficiency.

**h. Public Float**

“In determining efficiency, courts also consider the percentage of shares held by the public, rather than insiders.” *Krogman*, 202 F.R.D. at 478. During the Class Period, the public float represented approximately 99.6% of CenturyLink’s common stock, on average. Hartzmark Report, ¶ 52. There is no evidence that any insiders held any positions in the 7.6% Senior Notes. Hartzmark Report, ¶ 138. These high percentages of public

float support a finding of market efficiency. *See Första AP-Fonden*, 312 F.R.D. at 519 (97.8% public float weighed in favor of market efficiency).

**i. Bid-Ask Spread**

“The bid-ask spread is the difference between the price at which investors are willing to buy the stock and the price at which current stockholders are willing to sell their shares. A large bid-ask spread is indicative of an inefficient market, because it suggests that the stock is too expensive to trade.” *Krogman*, 202 F.R.D. at 478. During the Class Period, the average bid-ask spread for companies on the NYSE and NASDAQ (0.70%) was *17 times larger* than the bid-ask spread for CenturyLink common stock (0.04%). Hartzmark Report, ¶¶ 53-57. As there are no reported bid-ask spreads for corporate bond markets, Dr. Hartzmark analyzed customer trades with reporting dealers and determined that the average bid-ask spread for the 7.6% Senior Notes was 2.48%, and the median bid-ask spread was 2.55%. Hartzmark Report, ¶ 141; Ex. XVIII. Dr. Hartzmark also analyzed potential market-making trades between dealers and determined that the average bid-ask spread for such trades was 1.10%, with a median bid-ask spread of 0.93%. Hartzmark Report, ¶ 143; Ex. XVII. These narrow bid-ask spreads support a finding of market efficiency. *See Första AP-Fonden*, 312 F.R.D. at 519.

Therefore, all of the *Cammer* and *Krogman* factors support a finding that the markets for CenturyLink common stock and the 7.6% Senior Notes were efficient, and that the fraud-on-the-market presumption therefore applies.

## **2. Plaintiffs Are Entitled To A Presumption Of Reliance Under *Affiliated Ute***

In cases “involving primarily a failure to disclose, positive proof of reliance is not a prerequisite to recovery.” *Affiliated Ute Citizens of Utah v. United States*, 406 U.S. 128, 153 (1972). Rather, “[a]ll that is necessary is that the facts withheld be material in the sense that a reasonable investor might have considered them important in the making of this decision.” *Id.* at 153-54. The *Affiliated Ute* presumption also applies in cases where both misrepresentations and omissions exist. *See Beaver Cty. Emps.’ Ret. Fund*, 2016 WL 4098741, at \*7. Here, Plaintiffs allege that CenturyLink failed to disclose its practice of illegally cramming customer accounts, and that its deceptive practices artificially inflated its revenues. *See* Compl. ¶¶ 2, 44, 65, 115, 122, 178. Thus, Plaintiffs are entitled to rely on the *Affiliated Ute* presumption. *See Fogarazzao v. Lehman Bros., Inc.*, 232 F.R.D. 176, 186 (S.D.N.Y. 2005).

## **3. Common Issues of Damages Predominate**

Common damages issues predominate here because Class members’ damages can be calculated using common methodologies that apply uniformly to all Class members. And “[c]ourts frequently grant class certification despite individual differences in class members’ damages.” *In re Retek Inc.*, 236 F.R.D. at 436.

Specifically, Dr. Hartzmark demonstrates that damages can be determined using a standard “out of pocket” methodology that applies class-wide, which is “almost universally applied in federal securities litigation,” and has been accepted by this Court in numerous cases. Hartzmark Report, ¶¶ 184-92; *see Första AP-Fonden*, 312 F.R.D. at 516 (noting

that “courts commonly accept methodologies similar to [the out-of-pocket method] for determining individual damages”); *Beaver Cty. Emps.’ Ret. Fund*, 2016 WL 4098741, at \*11 (“The Coffman Report [proposing the out-of-pocket method] satisfies what *Comcast* demands, that a viable calculation of damages can be made in this case.”). Thus, damages are capable of measurement on a classwide basis, using a model consistent with Plaintiffs’ liability case and common questions about damages predominate. *See Första AP-Fonden*, 312 F.R.D. at 517.

**B. A Class Action Is Superior To Other Adjudicative Methods.**

Finally, a class action is superior to other available methods for fairly and efficiently adjudicating this controversy. Fed. R. Civ. P. 23(b)(3). “[S]ecurities cases easily satisfy the superiority requirement of Rule 23.” *In re NYSE Specialists Sec. Litig.*, 260 F.R.D. 55, 80 (S.D.N.Y. 2009); *see also Moorhead*, 1989 WL 91110, at \*6 (“[T]he class action is particularly appropriate for securities claims. Indeed, it must be deemed the *only* practical method of litigating these issues when the complex nature of the litigation and the comparatively small individual financial interests are considered.”) (emphasis in original).

Rule 23(b)(3) sets forth four issues for the Court to consider in its analysis: “(A) the class members’ interests in individually controlling the prosecution or defense of separate actions; (B) the extent and nature of any litigation concerning the controversy already begun by or against class members; (C) the desirability or undesirability of concentrating the litigation of the claims in the particular forum; and (D) the likely difficulties in managing a class action.” Fed. R. Civ. P. 23(b)(3).

Here, each of these factors shows that the superiority requirement is met in this case. First, Plaintiffs seek to represent a Class of thousands of CenturyLink securities purchasers whose individual damages may be too small to make the expense of litigation worthwhile. *Första AP-Fonden*, 312 F.R.D. at 522 (“[T]he prohibitive costs of prosecuting a securities class action like this one, compared to the relatively small potential recoveries, make it unlikely that class members would want or be able to prosecute their claims on an individual basis, or that it would be more efficient for them to do so.”). Second, counsel for Plaintiffs is unaware of any other litigation concerning this controversy already begun by or against Class members. Blatchley Decl., ¶ 3. Third, concentrating the litigation in this forum will promote judicial efficiency by resolving the claims of thousands of shareholders in one case. *In re Select Comfort Corp. Sec. Litig.*, 202 F.R.D. 598, 611 (D. Minn. 2001). Finally, this case does not present any manageability concerns. *Id.*

## **VII. LEAD COUNSEL SHOULD BE APPOINTED CLASS COUNSEL**

Rule 23(g) requires the Court to appoint class counsel when certifying a class. In appointing class counsel, the court must consider “(i) the work counsel has done in identifying or investigating potential claims in the action; (ii) counsel’s experience in handling class actions, other complex litigation, and the types of claims asserted in the action; (iii) counsel’s knowledge of the applicable law; and (iv) the resources that counsel will commit to representing the class.” Fed. R. Civ. P. 23(g)(1)(A). As discussed above, and as shown by the resumes attached to the Blatchley Decl. as Exhibits A and B, Lead Counsel has the substantial experience, knowledge, and resources necessary to fully represent the Class.

## VIII. CONCLUSION

For the foregoing reasons, the Class should be certified, Plaintiffs should be appointed Class Representatives, and Bernstein Litowitz and Stoll Berne should be appointed Class Counsel.

DATED: January 21, 2020

Respectfully submitted,

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# Exhibit 3

**UNITED STATES DISTRICT COURT  
DISTRICT OF MINNESOTA**

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**IN RE: CENTURYLINK SALES  
PRACTICES AND SECURITIES  
LITIGATION**

This Document Relates to:

Civil Action No. 18-296 (MJD/KMM)

**MDL No. 17-2795 (MJD/KMM)**

**DEFENDANTS' MEMORANDUM  
OF LAW IN OPPOSITION  
TO PLAINTIFFS' MOTION FOR  
CLASS CERTIFICATION AND  
APPOINTMENT OF CLASS  
REPRESENTATIVES AND CLASS  
COUNSEL**

Oral Argument Requested

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The Motion for Class Certification and Appointment of Class Representatives and Class Counsel (“Motion”) (Dkt. 188) should be denied because Plaintiffs<sup>1</sup> have not met their burden of establishing that reliance and damages can be proven on a class-wide basis. In addition, the Motion should be denied because Oregon is an atypical and inadequate class representative; it is subject to unique defenses rarely present in securities litigation that will consume fact discovery and the trial of this case.

***Plaintiffs Cannot Prove Reliance on a Class-Wide Basis.*** Plaintiffs rest on two presumptions to prove reliance of the putative class members on the misstatements and omissions alleged in the Consolidated Securities Class Action Complaint (“Complaint” or “Compl.”) (Dkt. 143). Without these presumptions, Plaintiffs cannot show that common issues predominate over individual questions as required by Rule 23(b)(3) of the Federal Rules of Civil Procedure. Neither presumption applies here.

Plaintiffs primarily rely on the “fraud-on-the-market” presumption. They allege that affirmative misrepresentations on 55 dates over a four-plus-year period directly affected the price of CenturyLink, Inc. (“CenturyLink”) common stock and 7.60% Senior Notes due September 15, 2039 (“Notes”), and thus the Court can presume, under *Basic*

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<sup>1</sup> “Plaintiffs” are Lead Plaintiff the State of Oregon, by and through the Oregon State Treasurer and the Oregon Public Employees Retirement Board, on behalf of the Oregon Public Employees Retirement Fund (“Oregon”), and Named Plaintiff Fernando Alberto Vildosola, as trustee for the AUFV Trust U/A/D 02/19/2009 (“Vildosola”).

*Inc. v. Levinson*, 485 U.S. 224 (1988), that every putative class member relied on those statements. However, the facts rebut the presumption:

- On only *four* of the 52 dates for which Plaintiffs claim CenturyLink’s alleged misstatements affected the price of CenturyLink securities<sup>2</sup> did the price of CenturyLink stock significantly increase;
- Plaintiffs’ expert has not established a statistically significant link between *any* alleged misrepresentations and changes in the price of CenturyLink stock and Notes, including for those four dates; and
- Plaintiffs’ expert has failed to establish that any of the three “corrective disclosures” actually “corrected” the alleged misrepresentations.

Based on this evidence of lack of price impact, the *Basic* presumption is rebutted, and Plaintiffs must prove by a preponderance of the evidence that the alleged misrepresentations in fact inflated the price of CenturyLink common stock and Notes. For these same reasons, they cannot do so.

Plaintiffs also claim a class-wide presumption of reliance on alleged omissions under *Affiliated Ute Citizens of Utah v. United States*, 406 U.S. 128 (1972). But in this Circuit, the presumption arises only when the seller breached a clear duty to disclose information, generally in the context of face-to-face transactions. Plaintiffs have failed to identify a clear duty to disclose (even when asked through an interrogatory), and virtually all of the at-issue transactions were conducted on impersonal markets. Furthermore, the *Affiliated Ute* presumption does not apply to cases, like this one, that center on alleged affirmative misstatements as opposed to omissions.

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<sup>2</sup> Plaintiffs allege CenturyLink made misstatements on 55 days, but the misstatements in total could theoretically have affected the price of CenturyLink securities on only 52 trading days. *See* Blair Decl. Ex. 1 at ¶ 9 n.10.

***Plaintiffs’ Damages Model is Not Connected to Their Liability Case.*** Plaintiffs have not shown that damages can be calculated on a class-wide basis, precluding certification under Rule 23(b)(3). Plaintiffs’ expert has opined that a common damages methodology could account for damages over the entire four-plus-year Class Period, but it is clear from his report and deposition that he has not done any work to show how he would or could calculate damages consistent with Plaintiffs’ theory of liability. His damages model—which is simply a calculation involving the subtraction of one number from another—fails to account for the theory of this case.

***Oregon is an Atypical and Inadequate Representative.*** Oregon is subject to unique non-reliance defenses that make it entirely different from all other putative class members:

- While it was purchasing CenturyLink securities, ***Oregon was conducting a law enforcement investigation*** of the alleged sales and billing practices it now claims CenturyLink concealed;
- Despite claiming to have learned about an alleged consumer fraud by CenturyLink in June 2017, Oregon inexplicably ***continued to purchase CenturyLink securities***; and
- Oregon admits it ***did not read or review the documents*** containing the alleged misstatements and omissions prior to purchasing CenturyLink securities, and that doing so was not part of its investment strategy.

Each of these issues raises significant questions about Oregon’s reliance on the alleged misrepresentations and omissions, which will distract from the claims of other putative class members during discovery and at trial.

***The Class Period Should End on June 16, 2017.*** Even if the Court certifies a class, the Class Period should end on June 16, 2017—not on July 12, 2017, as Plaintiffs propose. On June 16, *Bloomberg* published an article that revealed allegations of a

consumer fraud by CenturyLink; Oregon itself testified that it was the day the “dam broke” and the “market underst[ood], as a whole, what was occurring.” Post-June 16, purchasers cannot prove reliance on a class-wide basis under *Basic* or *Affiliated Ute*, because after this date, the price of CenturyLink securities no longer reflected any of the misrepresentations or omissions alleged in the Complaint. Accordingly, if a class is to be certified (and it should not be), the Class Period must end on June 16, 2017.

## **RELEVANT BACKGROUND**

### **I. THE PARTIES AND THE PUTATIVE CLASS**

CenturyLink is a Louisiana-based telecommunications company whose operating subsidiaries provide integrated services to enterprise and residential customers in the United States and abroad. Compl. at ¶¶ 28, 37. It is among the largest providers of communication services to enterprises. *Id.* at ¶ 37. The Executive Defendants<sup>3</sup> held senior positions at CenturyLink during the Class Period. *Id.* at ¶¶ 29–34.

Oregon alleges that it traded CenturyLink common stock throughout the Class Period. *See id.* at ¶ 26. Vildosola alleges that the AUFV Trust U/A/D 02/19/2009 purchased 30,000 units of Notes on January 30, 2015. *See id.* at ¶ 27.

Plaintiffs seek to certify the following class, subject to certain exclusions not relevant here:

All persons and entities that purchased or otherwise acquired publicly traded CenturyLink common stock or 7.60% Senior

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<sup>3</sup> The “Executive Defendants” are Defendants Glen F. Post, III, R. Stewart Ewing, Jr., David D. Cole, Karen Puckett, Dean J. Douglas, and G. Clay Bailey, collectively. Together, CenturyLink and the Executive Defendants are referred to as “Defendants.”

Notes due September 15, 2039, during the period between March 1, 2013 to July 12, 2017, inclusive (the “Class Period”), and who were damaged thereby (the “Class”).

Plaintiffs’ Memorandum in Support of the Motion (“Mem.”) (Dkt. 190).

## II. THE ALLEGED MISREPRESENTATIONS

Plaintiffs claim that CenturyLink routinely misquoted prices and improperly billed consumer and small business customers for services they did not request, a practice they describe as “cramming.” Compl. at ¶ 1. Plaintiffs further claim that CenturyLink and the Executive Defendants misled shareholders by “falsely attribut[ing] CenturyLink’s substantial revenue and subscriber growth in its consumer and small business segments to the Company’s focus on ‘customer needs’ and its ‘customer first’ sales approach, competitive ‘bundling’ marketing strategy, and strict adherence to the Company’s Unifying Principles: ‘fairness, honesty and integrity.’” *Id.* at ¶ 3. According to Plaintiffs, the revenue and subscriber growth in CenturyLink’s consumer and small business segments was, instead, driven entirely by the practices Plaintiffs refer to as “cramming.” *Id.* at ¶ 2.

Plaintiffs allege that Defendants made false and misleading statements on 55 different dates during the Class Period. *Id.* at ¶¶ 190–263 & App. A. Plaintiffs claim throughout their Complaint that Defendants “repeatedly” told investors false information and “touted” untrue facts about CenturyLink’s business model, strategy, revenue drivers, sales and billing practices, and culture. *See id.* at ¶¶ 15, 39, 40, 42, 48, 52, 54, 55, 58, 59, 151, 185, 193, 195, 208, 226. Plaintiffs claim that these allegedly false statements were “critical” to investors. *See id.* at ¶¶ 3, 61.

### III. THE ALLEGED CORRECTIVE DISCLOSURES

Plaintiffs claim that investors learned the “truth” about CenturyLink’s cramming scheme through three corrective disclosures on June 16, June 19, and July 12, 2017. *See id.* at ¶¶ 152–171. Plaintiffs allege that each of these disclosures caused the price of CenturyLink common stock and the Notes to decline in a “statistically significant” manner. *See id.* at ¶¶ 154, 160, 171, 266.

The evidence, however, does not support that these disclosures revealed a previously concealed “truth” about CenturyLink’s sales and billing practices or revenue trends. Most notably, ***not one*** of 14 leading market analysts lowered their target price estimates for CenturyLink in the week following the June 16 and June 19 disclosures. *See* Blair Decl. Ex. 1 at ¶ 115. The first analyst to lower its target price estimate for CenturyLink did so on June 29. *See id.* In fact, another analyst ***raised*** its target price estimate for CenturyLink two weeks after the alleged disclosures on July 5. *See id.*

In their commentaries on the lawsuit after the June 16 and June 19 disclosures, analysts specifically noted the decline in significance of CenturyLink’s consumer segment, and they viewed this decline as weakening any potential impact of the news. *See id.* at ¶¶ 117–22. Other analysts found the lawsuit to be a “mere distraction,” and another noted that the subject of the June 16 disclosure—the reporting of a former employee’s lawsuit alleging a “Wells Fargo-type” fraud at CenturyLink—would be inconsequential for CenturyLink’s investors. *See id.*

Analysts were likewise dismissive of the alleged corrective disclosure on July 12, 2017. After this “disclosure,” analysts reiterated their opinion in June that a lawsuit filed



by the Minnesota Office of the Attorney General (“MNAG”) against CenturyLink should have a “limited impact,” and that the issue had “been blown out of proportion in terms of timing and possible financial relevance.” *Id.* at ¶ 126. Another analyst similarly noted that the stock sell-off after the July 12 disclosure “looks overdone.” *Id.* at ¶ 127.

Finally, CenturyLink’s stock price did not move with or in response to specific news related to the June 19 statement. *Id.* at ¶ 157. Although at least three news stories discussing the lawsuits against CenturyLink were published over the weekend prior to Monday, June 19, CenturyLink’s stock opened at the same price level as it closed on Friday, June 16—and, in fact, **increased** right after the market opened. *Id.* at ¶ 158. Furthermore, any major price declines on June 19 were not preceded by any news releases. *Id.* at ¶ 159. Finally, the overall 1.4 percent decline in price on June 19 was not unique to CenturyLink: at least one of CenturyLink’s main competitors had a **greater price decrease** on the same day. *Id.* at ¶ 160. Thus, market factors, not the June 19 statement, were responsible for stock price changes.

### **STANDARD OF REVIEW**

Plaintiffs “must meet all of the requirements of Rule 23(a) and must satisfy one of three subsections of Rule 23(b).” *Ebert v. Gen. Mills, Inc.*, 823 F.3d 472, 477 (8th Cir. 2016) (quotations omitted). Although the Court has broad discretion to certify a class, it must conduct a “rigorous analysis” to determine whether the requirements have been met. *Postawko v. Mo. Dep’t of Corr.*, 910 F.3d 1030, 1036 (8th Cir. 2018).

Under Rule 23(a), Plaintiffs must **prove** that (1) the class is so numerous that joinder of the putative class members is impractical; (2) there are questions of law or fact

common to the class; (3) the claims or defenses of the representative parties are typical of the claims or defenses of the class; **and** (4) the class representatives are able to represent the class fairly and adequately. Fed. R. Civ. P. 23(a)(1)-(4); *see Wal-Mart Stores Inc. v. Dukes*, 564 U.S. 338, 350 (2011) (“A party seeking class certification must affirmatively demonstrate his compliance with the Rule—that is, he must be prepared to prove that there are *in fact* sufficiently numerous parties, common questions of law or fact, etc.”).

Plaintiffs “must also satisfy through evidentiary proof at least one of the provisions of Rule 23(b).” *Comcast Corp. v. Behrend*, 569 U.S. 27, 32 (2013). Here, Plaintiffs have moved for certification under subsection (b)(3) of Rule 23, *see* Mem. at 13, which requires proof that “questions of law or fact predominate over any questions affecting only individual members, and that a class action is superior to other available methods for fairly and efficiently adjudicating the controversy.” *Stuart v. State Farm Fire & Cas. Co.*, 910 F.3d 371, 374–75 (8th Cir. 2018) (quoting Fed. R. Civ. P. 23(b)(3)).

Plaintiffs bear the burden of proving compliance with each Rule 23 requirement by a preponderance of the evidence. *See Dukes*, 564 U.S. at 350 (“Rule 23 does not set forth a mere pleading standard.”); *Ferreras v. Am. Airlines*, 946 F.3d 178, 184 (3d Cir. 2019) (“Rule 23 . . . requires a showing that each of the Rule 23 requirements has been met by a preponderance of the evidence at the time of class certification.”). In determining whether Plaintiffs have met their burden of proof, the Court is permitted to consider merits questions to the extent “they are relevant in determining whether the Rule 23 prerequisites for class certification are satisfied.” *Postawko*, 910 F.3d at 1037.

## **ARGUMENT**

### **I. PLAINTIFFS CANNOT SATISFY THE RULE 23(B)(3) PREDOMINANCE REQUIREMENT BECAUSE INDIVIDUAL QUESTIONS OF RELIANCE OVERWHELM QUESTIONS COMMON TO THE CLASS**

Under the “rigorous analysis” standard, Plaintiffs have not proven that common questions predominate over individual questions of reliance. Accordingly, Plaintiffs do not meet the predominance criterion of Rule 23(b)(3), precluding certification of a class.

#### **A. Plaintiffs Cannot Prove Class-Wide Reliance with the *Basic* Presumption**

In attempting to prove that each putative class member relied on each of the alleged misstatements, Plaintiffs rely on the “fraud-on-the-market” presumption of reliance established by *Basic*. See Mem. at 14–15. However, the movement of CenturyLink’s stock and Note prices in response to the alleged misstatements and corrective disclosures rebuts that presumption. In the face of this evidence, Plaintiffs cannot carry their burden of proving that the fraud-on-the-market presumption applies in this case and that the predominance requirement has been satisfied.

##### **1. *The Basic Presumption Can Be Rebutted by the Production of Evidence of No “Front-End” or “Back-End” Price Changes***

To establish that every member of a putative class of investors “relied” on alleged misstatements, courts may employ a class-wide presumption of reliance established by *Basic*. See *Halliburton Co. v. Erica P. John Fund, Inc.*, 573 U.S. 258, 281–82 (2014) (“*Halliburton II*”). The *Basic* presumption substitutes for individualized proof of each buyer’s reliance on the alleged misrepresentations. *Basic*, 485 U.S. at 221. To invoke it,

Plaintiffs must show that the “misrepresentation . . . was reflected in the market price at the time of the transaction.” *Halliburton II*, 573 U.S. at 278.

A defendant can rebut the *Basic* presumption at the class certification stage by producing evidence that the alleged misrepresentation did **not** cause a change in market price. *Halliburton II*, 573 U.S. at 279, 284 (“Defendants should at least be allowed to defeat the [*Basic*] presumption at the class certification stage through evidence that the misrepresentation did not in fact affect the stock price.”); *IBEW Local 98 Pension Fund v. Best Buy Co., Inc.*, 818 F.3d 775, 780 (8th Cir. 2016) (“[T]he protracted *Halliburton* litigation clarified that there is an additional question at the class certification stage—whether the Rule 10b–5 defendant can rebut the *Basic* presumption with evidence showing an absence of price impact.”); *see also Find-What Investor Grp. v. FindWhat.com*, 658 F.3d 1282, 1314 n.32 (11th Cir. 2011) (as part of the reliance inquiry, courts must examine “whether the defendant’s fraud in fact affected . . . the purchase price”).

Once Defendants produce the rebuttal evidence, Plaintiffs have the burden of persuasion to show, by a preponderance of the evidence, that the alleged misrepresentations had a price impact when each putative class member purchased the securities. *Halliburton II*, 573 U.S. at 276 (“The *Basic* presumption does not relieve plaintiffs of the burden of proving—before class certification—that this requirement is met”); *accord Lupyan v. Corinthian Colleges Inc.*, 761 F.3d 314, 320 (3d Cir. 2014) (“The introduction of evidence to rebut a presumption destroys that presumption, leaving

only that evidence and its inferences to be judged against the competing evidence and its inferences to determine the ultimate question at issue.”).

There are two points when a defendant can “sever the link” between the alleged misstatements and the market price: (1) by directly showing that the alleged misrepresentations did not cause a price change at the time they were made (so-called “**front-end’ price impact**”); *or* (2) by showing that the alleged “corrective disclosures” did not deflate the price of the underlying security—either at all, or for reasons related to the earlier misrepresentations (“**back-end’ price impact**”). *Halliburton II*, 573 U.S. at 279–280 (“[T]he *Basic* presumption . . . c[an] be rebutted by appropriate evidence, including evidence that the asserted misrepresentation (*or* its correction) did not affect the market price of the defendant’s stock.”) (emphasis added). Where defendants make either showing and “sever the link” between the alleged misstatements and market prices, “the basis for finding that the fraud has been transmitted through the market [is] gone.”” *Id.* at 281 (quoting *Basic*, 485 U.S. at 248); *Best Buy*, 818 F.3d at 782 (“[W]hen plaintiffs presented a *prima facie* case that the *Basic* presumption applies to their claims, defendants had the burden to come forward with evidence showing a lack of price impact.”) (citing Fed. R. Evid. 301); *accord In re Moody’s Corp. Sec. Litig.*, 274 F.R.D. 480, 490, 492–93 (denying class certification in securities fraud case where defendants showed “alleged misrepresentation[s] did not] cause[] a statistically significant increase); *In re Zonagen, Inc. Sec. Litig.*, 322 F. Supp. 2d 764, 780–81 (S.D. Tex. 2003) (defendant in securities fraud case “rebutted the presumption of reliance by presenting evidence that none of the statements remaining at issue in th[e] case had an effect on the stock price”).

## 2. *The Evidence Shows No “Front-End” Price Impact*

The evidence shows that the alleged misrepresentations did **not** inflate the price of CenturyLink securities. Before examining the specific evidence here, it is important to note that Plaintiffs rely significantly on the opinion of their expert—who recently had his opinion about a “front-end” price impact analysis in another case rejected by a court. *See In re Finisar Corp. Sec. Litig.*, No. 11-cv-01252, 2017 WL 6026244, at \*6–8 (N.D. Cal. Dec. 5, 2017) (in securities fraud case, front-end price impact opinions provided by plaintiffs’ expert were subject to “criticisms [that] are valid,” such that “[d]efendants ha[d] demonstrated by a preponderance of the evidence that the [at-issue] statement had no price impact.”). Here, Plaintiffs’ expert has provided **no** analysis of front-end price impact, and CenturyLink’s expert has demonstrated that there was no readily discernible impact.

### a. *Almost Universally, the Alleged Misstatements Did Not Inflate the Price of CenturyLink Stocks*

No “front-end” price impact exists here. Plaintiffs’ expert has performed no analysis whatsoever of the extent to which the alleged misstatements actually affected CenturyLink prices. On the other hand, CenturyLink’s expert, Bruce Deal, has shown the absence of front-end price impact, because ***on 48 of the 52 days for which Plaintiffs allege CenturyLink’s misrepresentations affected the price of CenturyLink Securities, there was no statistically significant positive price movement in CenturyLink stock.*** Blair Decl. Ex. 1 at ¶ 72.

Remarkably, while Plaintiffs can demonstrate statistically significant positive price movement for only four dates, there was statistically significant ***negative*** price movement for eight of those 52 dates. *Id.* In other words, when considering the total pool of the misstatements Plaintiffs allege, ***those alleged misstatements were more likely to be associated with a material price decline than a material price increase.***

For example, among the alleged misrepresentations Plaintiffs identified on October 31, 2016, are then-CEO Glen Post’s statement that “while we still have more improvement to achieve on a year over-year basis in the third quarter, we added higher ARPU customers, lower churn and fewer . . . high-risk credit customers in the quarter.” Compl. at ¶ 233. Far from there being any inflationary effect, what followed was a statistically significant ***negative*** abnormal return on that date of -12.7%. Blair Decl. Ex. 1 at Ex. 18A. Likewise, despite Plaintiffs’ allegations of inflationary misrepresentations on seven other dates, on each of the subsequent trading days CenturyLink’s stock experienced a statistically significant ***negative*** abnormal return. Further, for 40 of the other 44 relevant dates, there was ***no statistically significant abnormal price movement in CenturyLink stock.*** *Id.* at Ex. 18A.

***b. Plaintiffs Cannot Demonstrate Front-End Price Impact by Reference to Four of the 52 At-Issue Dates***

Plaintiffs are left with just four of 52 relevant trading days on which there was statistically significant positive price movement. Four out of 52 does not justify certifying the class.

*First*, even if Plaintiffs could somehow show that the particular alleged misrepresentations caused the positive price movement on the four dates—and they have not—those four dates pale in comparison to the forty-eight dates on which there was either no statistically significant abnormal price movement or statistically significant *negative* price movement. The Court should not rely solely on the tiny minority of price impacts where, overall, the alleged misrepresentations generally are immaterial to the prices.

*Second*, CenturyLink disclosed other key information on these dates that likely resulted in the positive price impact. For example, on three of those four dates, CenturyLink disclosed revenue and earnings-per-share figures that were more positive than the market expected. Blair Decl. Ex. 1 at ¶¶ 73–76. Plaintiffs’ expert has made no attempt to disentangle the alleged misrepresentations from these positive financial results and other confounding statements. *Id.* at ¶¶ 68–72.

Overwhelmingly, the alleged misrepresentations did not have any statistically significant impact on the price of CenturyLink securities. The link between the alleged misstatements and stock price thus severed, the Court should deny Plaintiffs’ Motion.

***c. In Light of the Undisputed Evidence, Plaintiffs Cannot Credibly Argue All Alleged Misrepresentations “Maintained” the Prices***

Plaintiffs likely will respond that, for all 52 trading days, the alleged misrepresentations provided “just exactly enough positive information” to offset exactly whatever negative information was also provided to investors at each time, and thus prevent significantly negative abnormal price movement—a so-called “price



maintenance” theory. Courts are rightfully dubious of such theories. “A theory that statements maintained an inflated stock price is not evidence that can refute otherwise overwhelming evidence of no price impact.” *Ohio Pub. Emps. Ret. Sys.*, 2018 WL 3861840, at \*18; *see also Best Buy*, 818 F.3d at 783 (price maintenance theory “provided no evidence” that disproved defendant’s showing that price impact was absent); *In re Credit Suisse First Bos. Corp. (Lantronix Inc.) Analyst Sec. Litig.*, 250 F.R.D. 137, 145 (S.D.N.Y. 2008) (rejecting “price maintenance theory” given that “Rule 23 determinations must be based on ‘relevant facts’”).

Here, neither Plaintiffs nor their expert have articulated the details of any particular price maintenance theory.<sup>4</sup> To the contrary, Plaintiffs allege in the Complaint that “Defendants’ . . . plan, scheme and course of conduct . . . enabled Defendants to ***artificially inflate*** the price of CenturyLink stock and other securities.” Compl. at ¶ 281. Nor could Plaintiffs concoct a plausible price maintenance theory now, considering that they have alleged misrepresentations on numerous “information-rich” dates, each of which featured disclosures of many financial metrics and other complex communications. Blair Decl. Ex. 1 at ¶ 60. Even were they now to manufacture a price maintenance theory on reply, it could not extinguish the overwhelming evidence that the alleged misstatements simply did not affect the price of CenturyLink securities. Plaintiffs present

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<sup>4</sup> Plaintiffs’ brief contains a single statement that CenturyLink’s alleged misstatements “inflated *or maintained* the market price of CenturyLink’s securities.” *See* Mem. at 15. But Plaintiffs’ expert repeatedly refused to explain whether he believes this is a “price maintenance” case. Blair Decl. Ex. 2 at 161:10–162:3.

no basis for the Court to make a highly implausible assumption that the amount of unspecified negative information exactly balanced the alleged misrepresentations many dozens of times.

**3. The Evidence Also Shows No “Back-End” Price Impact**

Defendants can also rebut the *Basic* presumption by showing that later corrective disclosures did not materially deflate the price of the underlying security for reasons related to the earlier misrepresentations—meaning the market was not relying on those misrepresentations to materially inflate the price. *Halliburton II*, 573 U.S. at 280; *Ark. Teachers Ret. Sys. v. Goldman Sachs Grp., Inc.*, 879 F.3d 474, 486 (2d Cir. 2018) (holding “evidence that the market learned the truth . . . without any accompanying decline in the price of [the] stock” could show that alleged misstatements “did not actually affect the stock’s market price” under *Halliburton II*); *Ohio Pub. Emps. Ret. Sys.*, 2018 WL 3861840, at \*13 (“Expert testimony on back-end price impact is also admissible and directly relevant at the class certification stage.”).

The market reaction to the allegedly corrective disclosures provides further evidence of no price impact. **First**, none of the three disclosures provided new public information contrary to the alleged misrepresentations; **second**, there was no significant price decline associated with the June 19 disclosure.

**a. The Allegedly “Corrective” Disclosures Revealed Nothing More than the Fact of Litigation**

**First**, none of the three alleged disclosures revealed new information about CenturyLink’s sales and billing practices. Instead, the market learned only that a single

employee had launched a speculative lawsuit, and that other litigations eventually followed. Because the alleged disclosures revealed litigation, and did not “correct” the alleged misrepresentations, Plaintiffs cannot demonstrate any back-end price impact.

Courts have repeatedly held that, where the only new information disclosed prior to a stock price decline is the fact of litigation or regulatory action, the decline “more logically occurred because the market feared that [the] lawsuit” could harm the corporation. *Teachers’ Ret. Sys. of La. v. Hunter*, 477 F.3d 162, 187–88 (4th Cir. 2007); *see also Meyer v. Greene*, 710 F.3d 1189, 1201 (11th Cir. 2013) (“[S]tock prices may fall upon the announcement of an SEC investigation. . . . That does not mean that the investigations, in and of themselves, reveal to the market that a company’s previous statements were false or fraudulent.”).

The announcement of litigations against CenturyLink did not “correct” any alleged misrepresentations. When reports of a single whistleblower’s lawsuit came to light on June 16, 2017, they did not reveal anything new about CenturyLink’s sales and billing practices—only that a single employee had filed an unproven complaint. Nor did the consumer lawsuit or the MNAG lawsuit provide any new information besides tack-on allegations. This is especially so because the generic suggestions of cramming practices in the whistleblower’s complaint were consistent with preexisting public information about both CenturyLink and the telecommunications industry broadly. Blair Decl. Ex. 1 at ¶¶ 56–58.

Thus, all investors could have learned from the allegedly “corrective” disclosures were the fact of a whistleblower lawsuit against CenturyLink on June 16, 2017, the fact

of a consumer class action on June 19, 2017, and the fact of the MNAG litigation on July 12, 2017. Analyst notes following the disclosures confirm that these lawsuits themselves were the relevant new information, repeatedly highlighting the “lawsuits and regulatory actions” as a primary concern. Blair Decl. Ex. 1 at ¶¶ 117–130. Other analysts found the whistleblower lawsuit to be a “mere distraction.” *Id.* Initial investor sensitivity was likely heightened in the wake of the Wells Fargo scandal. *Id.* at ¶¶ 108–09. But in fact, analysts did not believe a “Wells-Fargo like scheme” had been revealed, as not one of them lowered their target price estimates for CenturyLink stock in the one-week period following the June 16 and June 19 disclosures. *Id.* at ¶ 115. Because the disclosures revealed only the fact of litigation, they did not “correct” any of the “misrepresentations” Plaintiffs allege, and any price impact is wholly absent.

***b. The June 19 Disclosure Did Not Cause a Material Drop in the Price of CenturyLink Stock***

***Second***, the evidence proves that the alleged “corrective disclosure” on June 19, 2017, did not cause any significant downward movement in the price of CenturyLink’s stock. Plaintiffs’ expert acknowledged that the price change on that date was statistically insignificant within scientifically acceptable levels. *See* Expert Report of Michael L. Hartzmark (“Hartzmark Rep.”) (Dkt. 191-3) ¶ 82, Appendix D ¶ 9; Blair Decl. Ex. 2 at 110:9–112:8.<sup>5</sup> CenturyLink’s expert performed the same analysis and similarly

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<sup>5</sup> During his deposition, Plaintiffs’ expert, Dr. Hartzmark, initially denied that there is any “scientifically-accepted level of certainty” in this context. Blair Decl. Ex. 2 at 109:14–110:16. When shown a portion of his own report stating that the 95 percent confidence level is the “scientifically-accepted level of certainty,” Dr. Hartzmark

concluded that CenturyLink stock did not experience a negative abnormal return that was statistically significant. Blair Decl. Ex. 1 at ¶ 143.

Moreover, the intraday movement of CenturyLink stock on June 19 is inconsistent with there being any curative disclosure for that date. The stock price moved sharply higher when that trading day began and there is little evidence that any particular intraday news story moved the stock’s price. *Id.* at ¶¶ 155–162. In fact, at least one of CenturyLink’s main competitors had a ***greater price decrease*** on the same day. *Id.* at ¶ 160. Further, it is implausible that, in a purportedly efficient market, the June 19 price movement could be tied to the June 16 disclosure, and therefore there is no basis for using a two-day abnormal return for the June 19 disclosure and ignoring the lack of statistically significant movement that day. *Id.* at ¶ 163.

**B. Plaintiffs Cannot Prove Class-Wide Reliance with the *Affiliated Ute* Presumption**

Plaintiffs claim that they are also entitled to a class-wide presumption of reliance ***on alleged omissions***. Mem. at 24 (citing *Affiliated Ute*). This “non-disclosure” presumption does not apply because (1) Plaintiffs have not identified a duty to disclose; and (2) this case is about affirmative misrepresentations, not omissions.

**1. Defendants Did Not Have a Duty to Disclose**

The *Affiliated Ute* presumption only “applies to claims involving primarily a failure to disclose by one with a duty to disclose.” *Beaver Cty. Emps’ Ret. Fund v. Tile*

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admitted both that a 95 percent confidence level is the “scientifically-accepted level of certainty” and that the stock price decline observed on June 19, 2017, fails to meet this standard. *Id.* at 110:17–112:06; Hartzmark Rep. App. D at 9.

*Shop Holdings, Inc.*, No. 14-cv-786, 2016 WL 4098741, at \*7 (D. Minn. 2016). The Eighth Circuit has recognized that such a duty generally arises only in the context of face-to-face transactions. *See In re NationsMart Corp. Sec. Litig.*, 130 F.3d 309, 321 (8th Cir. 1997).

Plaintiffs have not alleged that Defendants had any duty to disclose to the market the information that Plaintiffs allege was omitted, and they refused to respond to interrogatories seeking the identification of any such duty. *See* Blair Decl. Ex. 3. A duty to disclose does not arise automatically. *See Jensen v. Thompson*, No. 17-cv-4014, 2018 WL 1440329, at \*11 (D.S.D. Mar. 22, 2018) (“[Section] 10(b) and Rule 10b-5(b) do not create an affirmative duty to disclose any and all material information.”). Nor have Plaintiffs identified a relationship between the parties that might give rise to such a duty. *See NationsMart*, 30 F.3d at 322 (“The complaint alleged no direct contact between the plaintiffs and the defendants, so the plaintiffs are not entitled to the presumption of reliance for the non-disclosure of material information.”).

Plaintiffs’ failure to identify a duty to disclose means that Plaintiffs may not rely on the presumption under *Affiliated Ute*. *See Laventhall v. Gen. Dynamics Corp.*, 704 F.2d 407, 413 (8th Cir. 1983) (“*Affiliated Ute* involved parties that had dealt directly with each other and there clearly was a duty of disclosure owed. The plaintiffs there had a right to expect the defendants would fully disclose all material information. There is no such relationship in the instant case.”).

## 2. *Plaintiffs Cannot Turn a Case About Affirmative Misrepresentations Into a Case About Omissions*

*Affiliated Ute* creates a presumption of class-wide reliance in non-disclosure cases **only** where “the ‘thrust’ of the plaintiffs’ allegations is omissions and not affirmative misrepresentations.” *W. Va. Pipe Trades Health & Welfare Fund v. Medtronic, Inc.*, 325 F.R.D. 280, 288 (D. Minn. 2018); *see also Schwab v. E\*TRADE Fin. Corp.*, 752 F. Appx. 56, 58–59 (2d Cir. 2018) (“The *Affiliated Ute* presumption of reliance under this Court’s precedent is appropriate in cases involving **primarily** a failure to disclose . . .”). The non-disclosure presumption exists for cases primarily about omissions because “it is a practical impossibility for a plaintiff in a non-disclosure case to demonstrate reliance.” *Tile Shop Holdings, Inc.*, 2016 WL 4098741, at \*8.

The “thrust” of this case is alleged affirmative misrepresentations, not omissions. The Complaint extensively alleges that CenturyLink and the Executive Defendants made dozens of affirmative misstatements about the Company’s sales practices and drivers of revenue changes over a four-plus-year period. *See* Compl. at ¶¶ 90–267, Appendix A. Plaintiffs’ primary focus is the “truth” of what **Defendants affirmatively** communicated to the investing public. *See* Mem. at 3 (“**Defendants told investors** CenturyLink would never ‘place or record an order for our products and services for a customer without that customer’s authorization’—a clear denial of any cramming practices.”); 3–4 (“**Defendants instead claimed** that CenturyLink’s revenue growth was driven by its focus on excellent customer service, its ‘bundling’ marketing strategy, its focus on ‘customer

needs,’ and its faithfulness to CenturyLink’s Unifying Principles of ‘fairness, honesty, and integrity,’ and Code of Conduct.”).

Because this case centers on affirmative misstatements, and Plaintiffs are not forced to prove reliance on one or more non-disclosures, the *Affiliated Ute* presumption of reliance is unavailable. *See Waggoner v. Barclays plc*, 875 F.3d 79, 96 (2d Cir. 2017) (“[T]he Plaintiff’s complaint alleges numerous affirmative misstatements by the Defendants. The Plaintiffs are therefore not in a situation in which it is impossible for them to point to affirmative misstatements.”); *Loritz v. Exide Techs.*, No. 13-cv-02607, 2015 WL 6790247, at \*21 (C.D. Cal. July 21, 2015) (“This is thus not a case where Plaintiffs must show that they relied on [the defendant’s] silence.”).

Plaintiffs’ attempt to recast alleged misstatements as omissions should be rejected. *See e.g.*, Mem. at 24. Courts routinely see through such a gambit because by definition every affirmative misstatement necessarily omits the truth. *See, e.g., Schwab v. E\*TRADE Fin. Corp.*, 285 F. Supp. 3d 745, 753 (S.D.N.Y. 2018), *aff’d* 752 F. Appx 56 (2d Cir. 2018) (“The failure to disclose the alleged falsity of a representation does not transform a misrepresentation case into an omission case and allow a plaintiff to seek refuge in the *Affiliated Ute* presumption.”); *Waggoner*, 875 F.3d at 96 (“The *Affiliated Ute* presumption does not apply to earlier misrepresentations made more misleading by subsequent omissions, or to what have been described as ‘half-truths,’ nor does it apply to misstatements whose only omissions is the truth that the statement misrepresents.”). As the Tenth Circuit explained:



Any fraudulent scheme requires some degree of concealment, both of the truth and of the scheme itself. We cannot allow the mere fact of this concealment to transform the alleged malfeasance into an omission rather than an affirmative act. To do otherwise would permit the *Affiliated Ute* presumption to swallow the reliance requirement almost completely.

*Joseph v. Wiles*, 223 F.3d 1155, 1163 (10th Cir. 2000).

Put simply, this case is about the truth of statements Defendants made to investors, not omissions. Accordingly, the *Affiliated Ute* presumption does not apply.

## **II. PLAINTIFFS HAVE NOT OFFERED A DAMAGES METHODOLOGY THAT IS COMMON TO THE PUTATIVE CLASS AND CONSISTENT WITH THEIR LIABILITY THEORY**

Plaintiffs fail to establish that common issues predominate for a second reason: Plaintiffs do not have a way of systematically calculating damages on a class-wide basis consistent with their liability case.

### **A. Predominance Requires Proof that Class-Wide Damages Can Be Measured in a Way that is Consistent with Plaintiffs’ Liability Case**

To establish predominance, Plaintiffs must show that “damages are susceptible of measurement across the entire class.” *Comcast*, 569 U.S. at 35. Among other things, this requires Plaintiffs to put forward a damages model that is “consistent with [their] liability case.” *Id.* “If the model does not even attempt to do that, it cannot possibly establish that damages are susceptible of measurement across the entire class for purposes of Rule 23(b)(3).” *Id.* As with other requirements of Rule 23, this is not a mere pleading rule, but instead requires Plaintiffs to prove the required elements by a preponderance of the evidence. *Id.* In assessing whether Plaintiffs have proven that class-wide damages can

be measured in a way that is consistent with their liability case, the Court “must conduct a rigorous analysis to determine whether that is so.” *Id.*

Meeting this “rigorous” standard is no small task. “[W]hile a plaintiff does not need to ‘implement’ or ‘test’ his methodology at the class certification stage, he must still provide sufficient detail about the proposed methodology to permit a court to determine whether the methodology is suitable to the task at hand.” *Singleton v. Fifth Generation, Inc.*, No. 5:15-CV-474 (BKS/TWD), 2017 U.S. Dist. LEXIS 170415, at \*59–60, \*70 (N.D.N.Y. Sept. 27, 2017). Thus, in applying *Comcast*, courts have not hesitated to deny class certification where plaintiffs have failed to provide enough detail to satisfy the “rigorous analysis” that the Supreme Court requires. *See id.* (denying class certification because “Plaintiff has failed to propose a sufficiently-detailed and suitable model to ensure the alleged price premium for Tito’s vodka due to the ‘handmade representation.’”); *see also Ohio Pub. Emps.’ Ret. Sys.*, 2018 WL 3861840, at \*19 (“When a class plaintiff presents a damages model that is vague, indefinite, and unspecific, or simply asserts . . . that there are unspecified ‘tools’ available to measure damages, the model amounts to ‘no damages model at all,’ and the class cannot be certified.”); *Royal Park Invs. SA/NV v. Deutsche Bank Nat’l Trust Co.*, No. 14-CV-4394, 2018 U.S. Dist. LEXIS 61457, at \*57–60 (S.D.N.Y. Apr. 11, 2018) (rejecting plaintiffs’ assertion that their expert “*could* accommodate a certain factor or *could* account for specific issues by using inputs”; “even though [the expert] is unable to answer what would be relevant to apportioning damages . . . his methodology somehow simultaneously accounts for all relevant differences between class members without

requiring individualized determinations”); *see also In re BP p.l.c. Sec. Litig.*, No. 10-MD-2185, 2013 WL 6388408, at \*17 (S.D. Tex. Dec. 6, 2013) (“Plaintiffs have failed to meet their burden of showing that damages can be measured on a class-wide basis consistent with their theories of liability.”); *In re Domestic Drywall Anti. Litig.*, No. 13-MD-2437, 2017 WL 3700999, at \*14 (E.D. Pa. Aug. 24, 2017) (finding no predominance where damages model was “riddled with assumptions that divorce the model from the facts”); *Loritz*, 2015 WL 6790247, at \*22 (“On this record, Plaintiffs fail to show a damages theory tied to their theory of liability.”).

Plaintiffs’ only “evidence” on this point is the opinion of their expert, Dr. Hartzmark. Mem. at 24–25; Mem. at Ex. C ¶ 10, Op. 3. But as discussed below, Dr. Hartzmark does not actually describe a model for calculating damages in this case, much less offer any testimony showing how his proposed damages “method” would be consistent with Plaintiffs’ theory of liability in this case. As such, Dr. Hartzmark’s opinion does not come close to satisfying the “rigorous analysis” that the Supreme Court required in *Comcast*. *Comcast*, 569 U.S. at 33 (emphasis in original).

#### **B. Plaintiffs’ Expert Fails to Identify a Damages Model With the Specificity Required By *Comcast***

Dr. Hartzmark claims that damages can be measured by applying what he calls the “out-of-pocket method.” Mem. at Ex. C. ¶¶ 10, 184. This “out-of-pocket method” would compensate class members for the difference between what they paid for CenturyLink securities on a given date, on the one hand, and the true (or “but-for”) value of the securities as of that date, absent the alleged misrepresentations or omissions. *Id.* at ¶ 186.

To be clear, the “out-of-pocket method” is not a damages “model” (and indeed, Dr. Hartzmark himself very carefully avoids calling it a model, instead referring consistently to a “method”). In truth, it is nothing more than a proposed measure of damages, much like saying that the plaintiff in a breach of contract case should be paid the difference between what he would have received had the contract been performed and what he actually received. It is, in other words, a purely abstract and conceptual description of how damages should be measured. It does not show how damages could be calculated in this case, or that such a calculation could be done on a class-wide basis.

To calculate damages, Dr. Hartzmark proposes to use an “event study” in order to create an “inflation ribbon.” The “inflation ribbon” would attempt to measure the amount of fraud-related inflation in the price of CenturyLink’s securities on each day of the proposed Class Period, and this daily inflation amount would provide the inputs for the “out-of-pocket” formula. Mem. at Ex. C ¶¶ 188, 189. But this is where Dr. Hartzmark’s opinion stops. He does not offer any testimony showing how this “inflation ribbon” would be calculated in this case, much less in a way that is consistent with Plaintiffs’ theory of liability in this case.

This gap is important because Dr. Hartzmark himself admits that an event study cannot calculate the amount of inflation due to fraud, nor can it calculate the “but-for” price of a security (that is, the price at which the security would have sold absent the alleged misrepresentations or omissions). *Id.* at ¶¶ 189, 190. In other words, without more, an event study cannot calculate an “inflation ribbon.” Rather, an event study by

itself can only identify the change in the price of a security on a given date that is due to company-specific factors (as opposed to market or industry factors). *Id.* at ¶ 186.

Thus, to get from the results of the event study to the calculation of an “inflation ribbon,” Dr. Hartzmark would have to identify company-specific price movements (called “residual” or “abnormal” returns) that are causally linked to the alleged fraud—*e.g.*, either an increase in price following an alleged misstatement or a decrease in price after the market learned the previously undisclosed “truth”—and then apply them to every day in the proposed Class Period. *Id.* at ¶ 186. Although Dr. Hartzmark admits that this work would have to be done, his opinion offers no insight into whether or how it could be done in this case. He says only that calculating this inflation amount would require what he calls “parsing and scaling the abnormal returns.” *Id.* at ¶ 190.

During his deposition, Dr. Hartzmark explained that by “parsing,” he means that he may need to disaggregate “the price reaction to the alleged corrective disclosure to account for the loss caused by the fraud” to separate it from the stock price reaction from “nonfraud” events or disclosures. Blair Decl. Ex. 2 at 143:4–13. He also explained that he would have to “scale” the inflation ribbon to account for how the inflation caused by the alleged fraud may have varied over time. *Id.* at 143:14–21. But again, Dr. Hartzmark admits that he has not actually done any of this “parsing” or “scaling” work here, and more importantly, he did not explain how it would be done in this case, nor could he say for sure that it could be done here, in a way that is consistent with Plaintiffs’ theory of liability. *Id.* at 138:6–11.

In fact, Dr. Hartzmark was unable to explain much of anything during his deposition:

- ***He did not know what the allegations in this case are.*** When asked how he would calculate the inputs for his inflation ribbon for this specific case, he admitted that he “doesn’t know what the allegations are.” *Id.* at 141:24–142:2.
- ***He had not calculated an inflation ribbon for this case.*** When asked to explain exactly how he would actually calculate the “inflation ribbon” for this action, he refused to answer, stating, “[t]hat’s an obvious question of loss causation. I have not been asked to do a loss causation analysis.” *Id.* at 136:20–22; *see also* 165:19–21.
- ***He could not say whether a damages ribbon could be calculated for this case.*** When asked whether a damages ribbon *could* be calculated for this case, he responded “I’ve not calculated a damages ribbon.” *Id.* at 138:6–11.
- ***He could not say how he would calculate an inflation ribbon for this case.*** When asked how he *would* calculate a damages ribbon, he admitted that “I have not determined the techniques that would be used to calculate the inputs.” *Id.* at 147:2–4.
- ***He did not analyze the reasonableness of the assumption that the corrective disclosures were revelations of fraud.*** When asked how he would go about figuring out how much of the price reaction is fraud-related if it is determined that it is an overreaction, he once again repeated “I have not done a loss causation report.” *Id.* at 154:21–155:11.
- ***He has not considered whether the alleged fraud varied over the Class Period.*** When asked whether the fraud-related inflation in this case remained constant over the Class Period, he responded that he has “not

examined whether the losses caused by the fraud varied or not over the [C]lass [P]eriod . . . .” *Id.* at 161:12–162:3.

Unable to say whether or how he could apply his “out-of-pocket method” to the facts of this case, Dr. Hartzmark repeatedly fell back on a bare conclusion that he can adapt this method to whatever the evidence ends up showing in this case—in other words, “trust me.” *See* Blair Decl. Ex. 2 at 146:17–147:9 (testifying that “whatever the inputs are” would be put into his inflation ribbon and “applied classwide”). This is precisely the type of vague and conclusory approach that courts have rejected under the “rigorous analysis” required by *Comcast*. *See Singleton*, 2017 U.S. Dist. LEXIS 170415, at \*59–60, \*70; *Ohio Pub. Emps.’ Ret. Sys.*, 2018 WL 3861840, at \*19; *Royal Park Invs. SA/NV*, 2018 U.S. Dist. LEXIS 61457, at \*57–60; *In re BP p.l.c. Sec. Litig.*, 2013 WL 6388408, at \*17; *In re Domestic Drywall Anti. Litig.*, 2017 WL 3700999, at \*14; *Loritz*, 2015 WL 6790247, at \*22.

**C. Plaintiffs’ Expert Fails to Show How His “Out-Of-Pocket Method” Could Be Applied in a Way that Is Consistent With Plaintiffs’ Liability Case**

Dr. Hartzmark’s failure to identify or propose any technique for parsing or scaling the inflation ribbon for his damages model is particularly problematic in the context of Plaintiffs’ theory of liability in this case.

First, Plaintiffs identify five categories of allegedly inflationary misrepresentations in their Complaint. *See* Compl. at § VIII. The impact of each of these five categories of alleged misstatements will have to be calculated both separately and jointly, because some of these categories might have different price impacts, and Plaintiffs might prove

some but not others. Blair Decl. Ex. 1 at ¶ 12. But Dr. Hartzmark’s methodology does not address how any impacts of these different types of statements could be disaggregated.

Second, Plaintiffs’ Complaint identifies 52 different days, spread across each quarter over a 4-plus-year Class Period that were supposedly impacted by the allegedly inflationary disclosures. On each of these days, a large amount of information was disclosed other than the alleged misstatements. Blair Decl. Ex. 1 at ¶ 60. As Dr. Hartzmark testified, any inflation ribbon will need to disaggregate the impact of the allegedly fraudulent statements on those dates from any price reaction based on nonfraud. *Id.* at Ex. 2 at 143:4–13. However, he has not proposed a method that explains how this disaggregation could possibly be done.

Third, Plaintiffs allege that CenturyLink’s “cramming” scheme changed over time. According to Plaintiffs, in 2014, CenturyLink’s senior leadership “acknowledged the cramming practices” in its call centers and took steps to address the issue by making changes to CenturyLink’s “Quality Assurance” model, creating a new position dedicated to improving customer experience, and developing a new behavioral coaching model to measure employee performance. Compl. ¶¶ 8, 100–101, 110–11, 114. Plaintiffs allege that these steps *decreased* the amount of cramming. *Id.* at ¶ 111. But, according to Plaintiffs, at a later time, CenturyLink allegedly made the decision to “revert[] back to the old metrics system,” thereby causing a new rash of cramming. Compl. ¶ 112; Mem. at 4–5. Thus, as Dr. Hartzmark admits, the inflation ribbon will need to be scaled to account



for the periods when Plaintiffs allege that CenturyLink’s statements were not fraudulent. Blair Decl. Ex. 2 at 142:25–143:20. Again, though, Dr. Hartzmark has not proposed any way to account for these variations in his damages methodology.

Fourth, the alleged corrective disclosures revealed only accusations and investigations of alleged fraud and were announced into an environment that was already primed for fear, uncertainty, and doubt regarding Wells Fargo-like fraud. As such, Dr. Hartzmark agreed that it is necessary for any damages model to disaggregate the price reaction due to the possibility of a Wells Fargo-like fraud, from whatever fraud, if any, Plaintiffs are actually able to prove. *Id.* at 154:21–155:9. However, he has not articulated any method for doing so.

Finally, during the Class Period, the telecommunications industry as a whole was undergoing massive change due to decreased demand for services such as land lines, and increasing demand for supply of bandwidth due to audio, video, and data transmissions. Blair Decl. Ex. 1 at ¶ 9. Any inflation ribbon will need to be scaled to account for these industry changes. *Id.* As Defendants’ expert explains in his report, “these economic facts and circumstances make it very difficult, if not impossible, to identify exactly what information was (or wasn’t) moving CenturyLink’s stock price, let alone by how much on those 52 days.” *Id.*

Ultimately, Dr. Hartzmark provided no detail about how he could disaggregate the impact of fraud-related statements from other Company actions or disclosures, how he could scale the inflation ribbon to account for variations in the fraud over the Class

Period, or what techniques he would use to reliably calculate class-wide damages. *See* Blair Decl. Ex. 2 at 154:21–156:9, 165:2–166:5. Indeed, without any analysis of the facts of Plaintiffs’ case and what techniques could be used to apply those facts to the inflation ribbon, Dr. Hartzmark’s opinion could, essentially, be put forth in any securities action. Simply put, Dr. Hartzmark’s bare assurances fall well short of what Rule 23(b)(3) and *Comcast* require. *Royal Park Invs. SA/NV*, 2018 U.S. Dist. LEXIS 61457, at \*57–60; *Singleton*, 2017 U.S. Dist. LEXIS 170415, at \*59–60, \*70.

**D. *Halliburton I* Does Not Change Plaintiffs’ Burden Under *Comcast***

Dr. Hartzmark spent much of his deposition arguing that, as a legal matter, Plaintiffs are not required to prove loss causation at the class certification stage. *See, e.g.*, Blair Decl. Ex. 2 at 143:22–144:1. True enough, as an abstract point of law. But that legal point is completely irrelevant to whether Plaintiffs have met their burden under *Comcast* to show that damages can be calculated on a class-wide basis in a manner that is consistent with Plaintiffs’ theory of liability.

Apparently, Dr. Hartzmark believes that, because he plans to use a loss causation analysis to measure inflation, and *Halliburton I* holds that Plaintiffs do not have to prove loss causation at the class certification stage, Plaintiffs are somehow relieved of any obligation to explain, in any detail, how they intend to prove damages on a class-wide basis. Mem. at ¶ 190; Blair Decl. Ex. 2 at 143:22–144:1. But nothing in either *Halliburton I* or in *Comcast* supports that position. Plaintiffs are free to try and use a loss causation analysis to calculate damages, if they so choose. But having made that choice, *Comcast* still requires the Court to conduct a “rigorous analysis” of predominance under

Rule 23, which it can only do if Plaintiffs provide some level of detail about how they intend to calculate damages in a way that is consistent with Plaintiff's theory of liability in this case. The question of whether and when Plaintiffs are required to actually prove loss causation is beside the point.

Indeed, if accepted, Dr. Hartzmark's view would allow securities plaintiffs to obtain class certification by proving an efficient market and then saying, "event study." This would render *Comcast* a dead letter in securities class actions.

Simply put, at the class certification stage, if "damages c[an] be measured class-wide, [Plaintiffs] had an obligation to come forward with evidence thereof." *In re Monsanto*, 493 B.R. 852, 860 (Bankr. D.N.M. 2013). Plaintiffs chose not to provide any such evidence, and *Comcast* "does not allow [them] the luxury of waiting until trial." *Id.*

### **III. OREGON DOES NOT MEET THE TYPICALITY OR ADEQUACY REQUIREMENTS OF RULE 23(A)(3) AND (A)(4)**

Where, like here, a named plaintiff is subject to unique defenses, the plaintiff is an atypical and inadequate class representative. *In re Genesis Intermedia Sec. Litig.*, 232 F.R.D. 321 (D. Minn. 2015) ("[W]here the representative parties are subject to unique defenses, their claim is not typical of the class."). At the class certification stage, the question is not whether unique defenses would be successful, but whether litigation of those defenses would create a sideshow. *See id.*

Oregon is differently situated from virtually every other class member:

- (1) during the Class Period, it was conducting a law enforcement investigation of the very alleged sales and billing practices alleged in the Complaint;

- (2) it continued to purchase CenturyLink securities after it claims it learned of the existence of what it describes as CenturyLink’s fraud; and
- (3) it admittedly did not read or review the documents containing the alleged misstatements and omissions prior to purchasing CenturyLink securities.

Each fact, considered separately or cumulatively, raises significant questions of non-reliance that will consume the litigation if Oregon is appointed as a class representative.

**A. Throughout the Class Period, Oregon Had Unique Access to Information and an Opportunity to Uncover the Alleged Fraud**

Generally, an investor in securities is not a typical or adequate class representative if it had unique access to information and an opportunity to detect the fraud prior to purchase. *See Davidson v. Wilson*, 973 F.2d 1391, 1400 (8th Cir. 1992) (explaining that the plaintiff’s “opportunity to detect the fraud” is a relevant factor in determining whether reliance was justified); *In re Indep. Energy Holdings plc Sec. Litig.*, 210 F.R.D. 476, 481 (S.D.N.Y. 2002) (“[W]here plaintiffs are privy to non-public information not available to other investors, they may be subject to unique non-reliance defenses making them atypical and inadequate class representatives.”).

Contrary to the allegations of the Complaint, Oregon did not suddenly become aware of allegations of systematic cramming against CenturyLink in June 2017. Oregon began investigating allegations of the very sales and billing practices alleged in the Complaint in February 2014—more than three years before the corrective disclosures. *See Blair Decl. Ex. 4* (Oregon Department of Treasury, “AG Rosenblum Announces \$4m Settlement with CenturyLink” (December 31, 2019) (“In February 2014, Oregon DOJ

opened an investigation of CenturyLink in response to over 1,000 consumer complaints, including complaints about the company misrepresenting the price of services, failing to inform consumers of terms and conditions that could affect the price, and billing consumers for services they never received.”)). Oregon’s investigation concerned the same sales practices that, according to the Complaint, CenturyLink allegedly concealed through false statements to the investing public. *See id.* (“Oregon DOJ will continue to lead a separate securities class action lawsuit *arising from the same conduct.*”) (emphasis added). In connection with its investigation, Oregon had access to non-public documents and information—many of which were provided by CenturyLink in response to civil investigative demands. *See, e.g.,* Blair Decl. Ex. 5.

During deposition testimony, Oregon explained that during the Class Period, it relied on external investment managers to actively manage Oregon assets because those managers had access to “unique information sources.” *See id.* at Ex. 6 at 129:7–15 (Q. “And your testimony is that the active managers that OST uses were relying not just on financial market information but also other resources; is that correct? [Objection omitted] A. Other unique data sources or research that potentially adds value.”). Oregon also testified that its active management strategies relied on “dislocations” in the market. *See id.* at 149:21–150:7 (“Q. [I]t’s difficult to beat the market, but – under the semi-strong hypothesis, but Oregon’s strategy is expressly to select active managers that can and will, right? A. Correct. Q. And they do that, at least in part, by exploiting market inefficiencies, right? [Objection omitted] A. I would say that they’re implementing market strategies that exploit dislocation.”).

Oregon's unique access to non-public documents and information about CenturyLink and its practice of relying on "unique data sources or research" and "market dislocation" set it apart from virtually every other investor in the putative class. No other investor had unfettered access to consumer complaints, the ability to conduct law enforcement investigations, and possession of non-public information from the perpetrator of an alleged fraud well in advance of the corrective disclosure dates.

Questions about whether Oregon had unique information bearing on the truth of alleged misstatements and omissions—and whether it relied on those misstatements and omissions—loom large in fact discovery and any eventual trial in this action. Defendants have already spent, and will continue to spend, considerable time probing Oregon's non-reliance on the misstatements and omissions alleged in the Complaint. *See Landry v. Price Waterhouse Chartered Accountants*, 123 F.R.D. 474, 476 (S.D.N.Y. 1989) ("Each of these plaintiffs would be required to devote considerable time to rebut the claim that their purchases were based not on the integrity of the market, but on non-public information that they received . . .").

**B. Oregon Continued Purchasing CenturyLink Securities Even After Learning of the Alleged Fraud**

Oregon *continued to purchase CenturyLink securities* even after allegedly learning of the alleged fraudulent scheme. *Cf. George v. China Auto. Sys., Inc.*, No. 11-cv-7533, 2013 WL 3357170, at \*6 (S.D.N.Y. 2013) ("A named plaintiff who has engaged in a post-disclosure purchase is subject to the defense that the alleged misstatements or

omissions were really not a factor in the purchasing decision but rather that other investment considerations drove the decision.”).

Oregon testified that news on June 16, 2017 of the former CenturyLink employee’s complaint alleging a Wells Fargo-style fraud “basically broke the trust of the investment community.” Blair Decl. Ex. 6 at 204:15–24; *id.* at 204:6–7 (“A. All that information—the dam broke on June 16, 2017.”); *id.* at 218:8–16. Yet within weeks of learning of the complaint and the alleged fraud, Oregon purchased *thousands* of shares of CenturyLink common stock for the very fund that allegedly suffered losses on its CenturyLink positions. Blair Decl. Ex. 7 (PL\_0005123); *see also* Blair Decl. Ex. 6 at 221:7–14 (“Q. Do these five entries [on PL\_0005123] reflect that Oregon State Treasury employees were purchasing CenturyLink securities within weeks of supposedly learning that the company was engaged in a systematic fraud? A. This report shows that the internal S&P 500 portfolio and risk premia portfolio did in fact buy CenturyLink securities on those trade dates.”).

These post-disclosure purchases make Oregon subject to unique non-reliance defenses in fact discovery and trial, which will prevent Oregon from serving as an effective class representative. *See Rocco v. Nam Thai Elecs, Inc.*, 245 F.R.D. 131 (S.D.N.Y. 2007); *Berwecky v. Bear, Stearns & Co.*, 197 F.R.D. 65, 69 (S.D.N.Y. 2000) (“[A] person that increases his holdings in a security after revelation of an alleged fraud involving that security is subject to a unique defense that precludes him from serving as a class representative.”); *In re Safeguard Scientifics*, 216 F.R.D. 577, 582 (E.D. Penn. 2003) (“Defendants have shown that [the lead plaintiff] increased his holdings in

Safeguard stock even after public disclosure of the alleged fraud. [The lead plaintiff] would have made—and in fact did—purchase stock regardless of the fraudulent omission.”).

**C. Oregon Did Not in Fact Rely on Any of the Alleged Misstatements or Omissions**

Finally, Oregon admitted that it did not read any of the documents containing the alleged misstatements and omissions alleged in the Complaint. This evidence creates a unique non-reliance defense that renders Oregon both an atypical plaintiff and an inadequate representative. *See In re GenesisIntermedia, Inc. Sec. Litig.*, 232 F.R.D. 321, 333–34 (D. Minn. 2005) (“The Court determines that Plaintiffs have failed to satisfy their burden to show that common issues of fact and law will predominate, given that their theory of reliance does not apply to [putative class representative]; this creates a schism between and among class representatives and members.”).

One way the reliance presumption is rebutted is when the named plaintiff did not actually see the documents containing the alleged omission, and thus could not have relied on the omission: *Shores v. Sklar*, 647 F.2d 462, 468 (5th Cir. 1981) (“If the plaintiff would have followed the same course of conduct even with full and honest disclosure, then the defendant’s action (or lack thereof) cannot be said to have caused plaintiff’s loss.”). If the named plaintiff did not rely on the document with the alleged omission, then the question of reliance becomes individualized and the Rule 23(b) predominance requirement is not met. *See In re GenesisIntermedia*, 232 F.R.D. at 333–34 (“The Court determines that Plaintiffs have failed to satisfy their burden to show that



common issues of fact and law will predominate, given that their theory of reliance does not apply to [putative class representative]; this creates a schism between and among class representatives and members.”).

That is the case here: Plaintiffs admit they did not read the document with the alleged omissions prior to purchasing CenturyLink’s securities. Oregon never read it before filing the lawsuit:

Q. Prior to initiating this litigation, had the State of Oregon ever read any of the documents cited in Appendix A [to the Complaint]?

A. I have no knowledge as to whether any of Oregon’s managers had read these specific documents.

....

A. We don’t do fundamental internal analysis, so there’s no reason for internal portfolio managers, myself or any of my co-workers, to look at these documents or to sit in on earnings calls. Our strategies are systematic.

....

Q. You wouldn’t rely on these documents in executing the strategies that you’ve explained to me that are internal to OST?

[Objection omitted]

A. No.

Blair Decl. Ex. 6 at 215:8–12, 216:9–19.<sup>6</sup>

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<sup>6</sup> Likewise, Vildosola testified that he had not reviewed any of the documents containing the alleged omissions prior to transacting in CenturyLink securities. *See* Blair Decl. Ex. 8 at 101:9–19 (“Q. During the [C]lass [P]eriod, did you review CenturyLink’s SEC filings? A. No.”).

These admissions rebut the presumption of reliance under *Affiliated Ute*. *Cf. Shores*, 647 F.2d at 468 (“[Plaintiff] alleges that the Offering Circular contained material misrepresentations and failed to state material facts necessary to make the statements made no misleading. At the same time, he admitted that he never read or otherwise relied on the Offering Circular. If the *Ute* presumption applies to these nondisclosures, [plaintiff’s] admission rebuts it.”); *Eckstein v. Balcor Film Investors*, 58 F.3d 1162, 1171 (7th Cir. 1995) (“People who did not rely on what was *in* the materials cannot have relied on what was omitted; to them the public offering materials were so much waste paper.”) (emphasis in original).

#### **IV. EVEN IF A CLASS CAN BE CERTIFIED, THE COURT SHOULD SHORTEN THE CLASS PERIOD**

Even if the Court certifies a class (and it should not), the Class Period must end on June 16, 2017, because any alleged misrepresentations and omissions were corrected—and any presumption of class-wide reliance collapsed—on that date. *See* Mem. at 2 (seeking a Class Period of March 1, 2013 to July 12, 2017); *cf. Carpenters Pension Trust Fund of St. Louis v. Barclays plc*, 310 F.R.D. 69, 97 (S.D.N.Y. 2015) (“In the case of a securities fraud class action, courts are required to cut off the class period on the date of a statement or event that cures the market.”) (quotations omitted).<sup>7</sup>

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<sup>7</sup> The length of the Class Period is properly resolved at the class certification stage because it implicates the Rule 23(b)(3) predominance requirement. *See Medtronic*, 325 F.R.D. at 294 (“The Supreme Court’s most recent decision in *Halliburton II* affirms the Court’s conclusion that the Court may modify the class period during the class-certification stage.”) (collecting cases).

**A. The June 16, 2017, *Bloomberg* Article Fully Disclosed Allegations of CenturyLink’s Fraud to the Market**

The June 16, 2017 *Bloomberg* article detailed a whistleblower’s lawsuit against CenturyLink, including allegations of a Wells Fargo-style fraud and knowledge of that fraud by the Company’s senior executives. *See* Blair Decl. Ex. 9. Oregon testified that June 16, 2017, was the day “the dam broke” and that the revelations “basically broke the trust of the investment community” in CenturyLink. *See* Blair Decl. Ex. 6 at 204:3–11; 204:20–24. Oregon also testified that when the article was published, investors understood that CenturyLink might be perpetrating a massive fraud on customers. *See id.* at 220:4–10 (“Q. So on June 16, 2017 the State of Oregon understands for the first time that CenturyLink is engaged in widespread fraud. That’s your testimony? A. I would say the market understands, as a whole, what was occurring at that point in time.”).

Because the June 16, 2017, article revealed (baseless) allegations of a fraudulent scheme to the market, it severed the link between the alleged misrepresentations and omissions and the price of CenturyLink securities. *See Medtronic*, 325 F.R.D. at 295 (“The entire scheme at issue . . . was fully revealed to the public on June 28, 2011, and therefore the omission of the scheme could not have been reflected in the market price at the time of a transaction after that date.”) (quotations omitted); *In re Fed. Nat’l Mortg. Ass’n Secs., Derivative & ERISA Litig.*, 247 F.R.D. 32, 38 (D.D.C. Jan. 7, 2008) (“The influx of curative information into the market rebuts this presumption because the fraud underlying the complaint is disclosed.”). The revelations also made reliance after June 16, 2017, unreasonable as a matter of law. *See Medtronic*, 325 F.R.D. at 295 (holding

that on June 28, 2011, the facts at the center of the plaintiffs’ claims were disclosed to the public, making reliance on misstatements after that date unreasonable).

Accordingly, post-June 16, 2017 purchasers cannot rely on the *Basic* or *Affiliated Ute* presumptions to prove reliance, and the Class Period must end on June 16, 2017. *See Medtronic*, 325 F.R.D. at 294 (noting that defendants can “rebut the presumption with respect to a discrete portion of the class by introducing evidence that this portion of the class purchased the securities after the date of the corrective disclosure”); *In re Am. Italian Pasta Co. Sec. Litig.*, No. 05-cv-0725, 2007 WL 927745, at \*4 (W.D. Mo. Mar. 26, 2007) (closing class after first disclosure because “investors (and the market) knew on [the date of the first disclosure] that financial information previously disseminated by Defendants was suspect and should not be relied upon”); *Alaska Elec. Pension Fund v. Pharmacia Corp.*, No. 03-cv-1519, 2007 WL 276150, at \*4 (D.N.J. Jan. 25, 2007) (ending class period on February 7, 2001 because “prior to February 6th [purchasers] . . . could no longer reasonably rely on Defendants’ positive statements”).

**B. The June 19 Article and July 12 Announcement Provided No Additional Information to the Market**

Plaintiffs attempt to justify a later end to the Class Period by citing a June 19 *Bloomberg* article and July 12 public statement by the MNAG as additional “partial corrective disclosures.” Mem. 5–6. However, the June 19 article and July 12 announcement were not corrective disclosures because they “reiterated and reinforced” the June 16 article. *See Am. Italian Pasta Co.*, 2007 WL 927745, at \*4; *Rand-Heart of N.Y., Inc. v. Dolan*, 812 F.3d 1172, 1180 (8th Cir. 2016) (“Corrective disclosures must

present facts to the market that are new, that is, publicly revealed for the first time, because, if investors already know the truth, false statements won't affect the price.”) (quotations omitted).

The June 19 article, which reported that a follow-on consumer class-action complaint had been filed within a day of the whistleblower lawsuit, broke no new ground. *See* Blair Decl. Ex. 10. The article repeated the previously reported allegations of fraud and even described the class-action complaint as echoing the whistleblower’s lawsuit. *See id.* At most, the June 19 article was a “confirmatory disclosure,” not a “corrective disclosure.” *See Catogas v. Cyberonics*, 292 F. Appx. 311, 314 (5th Cir. 2008) (“[C]onfirmatory information—that information already known to the market—may *not* constitute such a corrective disclosure.”) (emphasis in original).

Nor did the July 12 announcement by the MNAG provide new information to the market. *See* Blair Decl. Ex. 11. The MNAG merely announced its state-court lawsuit against CenturyLink but did not provided any “new, fraud-revealing analysis.” *In re Apollo Grp., Inc. Sec. Litig.*, No. 04-cv-2147, 2008 WL 3072731, at \*3 (D. Ariz. Aug. 4, 2008). At bottom, the MNAG announcement publicized details of a state-wide fraud that had previously been described as national. That is not a corrective disclosure. *See Hayes v. MagnaChip Semiconductor Corp.*, No. 14-cv-01160, 2016 WL 7406418, at \*8 (N.D. Cal. Dec. 22, 2016) (rejecting argument that subsequent disclosures that provided additional details about extent of the fraud constituted partial corrective disclosures).

Tellingly, Oregon testified that the June 19 article and July 12 announcement were “noise” and “more substantiation of what was going on”—in other words, not new information to the market:

A. I remember the whistleblower because it was CenturyLink and it happened around the time as Wells Fargo. So subsequent releases and data, it was just—that’s just noise. It’s just more information. This was going on. It was systemic.

...

Q. You said that the June 16th article was the big one, and then you said the subsequent releases and data, that’s just noise. Is that your testimony?

[Objection omitted]

A. More substantiation of what was going on.

Blair Decl. Ex. 6 at 193:17–195:1.

The June 16 *Bloomberg* article severed the link between any misrepresentations or omissions and the price of CenturyLink securities, ending any presumption of reliance for post-June 16 purchases. Plaintiffs can articulate neither what misrepresentations or omissions remained uncorrected after June 16 nor what new information was revealed to the market on June 19 or July 12. Accordingly, the Class Period must end on June 16, 2017.

### **CONCLUSION**

For the foregoing reasons, the Court should deny Plaintiffs’ Motion or, in the alternative, certify a class with a shortened Class Period that ends on June 16, 2017.

Dated: March 23, 2020

Respectfully submitted,

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**UNITED STATES DISTRICT COURT  
DISTRICT OF MINNESOTA**

**IN RE: CENTURYLINK SALES  
PRACTICES AND SECURITIES  
LITIGATION**

This Document Relates to:

Civil Action No. 18-296 (MJD/KMM)

**MDL No. 17-2795 (MJD/KMM)**

**LOCAL RULE 7.1 CERTIFICATE  
OF COMPLIANCE FOR  
DEFENDANTS' MEMORANDUM  
OF LAW IN OPPOSITION TO  
PLAINTIFFS' MOTION FOR CLASS  
CERTIFICATION AND  
APPOINTMENT OF CLASS  
REPRESENTATIVES AND CLASS  
COUNSEL**

Defendants hereby certify that the accompanying MEMORANDUM OF LAW IN OPPOSITION TO PLAINTIFFS' MOTION FOR CLASS CERTIFICATION AND APPOINTMENT OF CLASS REPRESENTATIVES AND CLASS COUNSEL complies with Local Rule 7.1(f). I further certify that Microsoft Word 2016 was used to prepare the Memorandum and when applied specifically to include all text, including headings, footnotes and quotations, generated a word count of 11847 in 13-point Times New Roman font, in accordance with Local Rule 7.1(h).

Dated: March 23, 2020

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# Exhibit 4

**UNITED STATES DISTRICT COURT  
DISTRICT OF MINNESOTA**

IN RE: CENTURYLINK SALES  
PRACTICES AND SECURITIES  
LITIGATION

MDL No. 17-2795 (MJD/KMM)

This Document Relates to:  
Civil File No. 18-296 (MJD/KMM)

**REPLY MEMORANDUM OF LAW IN FURTHER SUPPORT OF PLAINTIFFS'  
MOTION FOR CLASS CERTIFICATION**

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Plaintiffs' opening motion established that this case is ideally suited for class treatment. In opposition, Defendants concede that this case satisfies virtually all Rule 23 requirements, including that common issues predominate for most liability elements of Plaintiffs' claims. Defendants largely concede that at least some class should be certified in asking the Court, in the alternative, to simply shorten the class period.

The limited challenges Defendants do raise are fatally flawed. **First**, under the guise of challenging "price impact," Defendants contend that the corrective disclosures revealing CenturyLink's "Wells Fargo-like" misconduct were not "actual" corrective disclosures. But Defendants' own expert agrees two corrective disclosures are statistically significant, which dooms this argument. Moreover, Defendants' argument raises an issue of loss causation which, as the U.S. Supreme Court has held, is a class-wide merits issue that is irrelevant at the class certification stage. *Erica P. John Fund, Inc. v. Halliburton Co.*, 563 U.S. 804, 812-15 (2011) ("*Halliburton I*").

**Second**, Defendants dispute Plaintiffs' "out-of-pocket" damages model under *Comcast*, again raising premature (and class-wide) merits issues. But they ignore that this well-accepted method is used in nearly every securities class action, and even Defendants' own expert testified that Plaintiffs' methodology is common to all members of the class.

**Last**, Defendants attack Oregon's adequacy by baselessly contending that it traded on material nonpublic information, disregarding uncontroverted testimony refuting this nonsensical claim. In reality, Oregon is the exact type of Lead Plaintiff Congress intended to lead securities class actions and has ably represented the class here.

## I. DEFENDANTS FAIL TO PROVE LACK OF PRICE IMPACT

Defendants spend most of their opposition attempting to rebut the *Basic* presumption of class-wide reliance by showing that Defendants’ misstatements and omissions lacked price impact. To prevail on this argument, Defendants bear the burden of persuading the Court that they have completely “sever[ed] the link” between the alleged misrepresentations and any impact on CenturyLink’s stock price. *Basic Inc. v. Levinson*, 485 U.S. 224, 248 (1988); *see also Halliburton Co. v. Erica P. John Fund, Inc.*, 573 U.S. 258, 281-82 (2014) (“*Halliburton II*”) (defendants must “show[] that the alleged misrepresentation[s] did not actually affect the stock’s market price”); *Waggoner v. Barclays PLC*, 875 F.3d 79, 101 (2d Cir. 2017) (defendants must “demonstrate that the misrepresentations did not affect the stock’s price by a preponderance of the evidence”). This “heavy burden” presents a “daunting task” that requires Defendants to prove “that the market would not have reacted had [Defendants] told the truth,” and that the “alleged misstatements [had] no price impact whatsoever.” *Arkansas Teacher Ret. Sys. v. Goldman Sachs Grp., Inc.*, 955 F.3d 254, 271 (2d Cir. 2020); *Monroe Cty. Emps.’ Ret. Sys. v. Southern Co.*, 332 F.R.D. 370, 393 (N.D. Ga. 2019).

Moreover, because price impact can be observed on the “front-end” (*i.e.*, misstatements causing or maintaining inflation) **or** on the “back-end” (*i.e.*, a decline in price caused by the corrective disclosures), Defendants must affirmatively disprove **both** to satisfy their burden. *See Goldman*, 955 F.3d at 265-66, 271 (rejecting argument that absence of price movement on misstatement days rebutted price impact because “inflation was demonstrated on the [corrective-disclosure] dates”); *In re Vivendi, S.A. Sec. Litig.*, 838

F.3d 223, 260 (2d Cir. 2016) (rejecting notion that price impact requirement means a “misstatement must be associated with an increase in inflation to have any effect”); *Southern Co.*, 332 F.R.D. at 395; *Hatamian v. Advanced Micro Devices, Inc.*, 2016 WL 1042502, at \*7-8 (N.D. Cal. Mar. 16, 2016).

Defendants’ own expert concedes that the evidence does not prove a complete absence of either front-end or back-end impact, and testified at deposition that he was not even asked to prove a lack of price impact. Instead, Defendants oppose class certification by attempting to reverse the burden. DB-9-19. But the Supreme Court has rejected this approach. *Halliburton II*, 573 U.S. at 278-79 (plaintiffs are not required show price impact at the class certification).<sup>1</sup>

#### **A. Defendants Fail To Disprove Back-End Price Impact**

To rebut the reliance presumption by showing a lack of “back-end” price impact, Defendants “must show...that the entire price decline on the corrective-disclosure dates was due to something other than the corrective disclosures.” *Goldman*, 955 F.3d at 271; *see also, e.g., In re Sadia, S.A. Sec. Litig.*, 269 F.R.D. 298, 315 (S.D.N.Y. 2010) (defendants must prove not even “a penny” attributable to corrective disclosures). Here, Defendants must prove that none of the corrective disclosures—revealing a whistleblower

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<sup>1</sup> Citations to “P¶\_\_” and “PX-\_\_” refers to the paragraphs and exhibits, respectively, in the Blatchley Declaration filed herewith. “DX-\_\_” refers to the exhibits to the Blair Declaration (ECF No. 227) and “DB-\_\_” refers to Defendants’ opposition (ECF No. 226). References to “¶\_\_” are to the Complaint (ECF No. 143), “Deal-Rpt.¶\_\_” refers to the Expert Report of Bruce Deal (ECF No. 227-1), and “Hartzmark-Rbt.¶\_\_” refers to the accompanying Rebuttal Report of Dr. Hartzmark. Unless noted, defined terms are those in the Complaint, internal citations are omitted, and all emphasis is added.

lawsuit, nationwide consumer class actions, and the findings of the Minnesota Attorney General’s year-long investigation—revealed **anything** false about any of Defendants’ misstatements. The sole basis for Defendants’ back-end price impact argument is their expert’s analysis, which fails to make this showing for several reasons.

**First**, Mr. Deal simply has **not** opined that there was no price impact. He performed none of the analysis necessary to support any such opinion. He does not dispute that the price declines on two of the three corrective disclosure days are statistically significant and conceded that there was a negative abnormal decline on the third date. Deal-Rpt.¶¶141-42, 145; Hartzmark-Rbt. ¶¶21-22. He identified no confounding information disclosed on the corrective disclosure dates, and made no attempt to scientifically analyze whether **any** of the price decline on those days was unrelated to the fraud—let alone the **entirety**—as Defendants must prove to carry their burden. Hartzmark-Rbt.¶¶11-12, 46-68; PX-H at 164:19-165:21; *see Goldman*, 955 F.3d at 271-74.

Mr. Deal’s admission that statistically significant returns followed two of the corrective disclosures—the June 16, 2017 disclosure of the whistleblower lawsuit and July 12, 2017 revelation of the Minnesota Attorney General lawsuit—is alone fatal. *E.g.*, Deal-Rpt.¶¶141-42, 145; *see also* PX-H at 90:15-91:2. These disclosures show that there *was* price impact, and should end the dispute. *See Hatamian*, 2016 WL 1042502, at \*7-8 (granting certification where defendants conceded statistically significant declines on corrective disclosures); *Southern Co.*, 332 F.R.D. at 395 (same).

**Second**, the limited opinion Mr. Deal has offered amounts to a premature loss causation argument that is improper at this stage. Specifically, Defendants assert that the

corrective disclosures “did not reveal anything about CenturyLink’s sales and billing practices” and thus did not “‘correct’ the alleged misrepresentations.” DB-16-17. But this is a paradigmatic loss causation argument. *See Halliburton I.*, 563 U.S. at 811-12 (proving a stock price decline occurred because of “the correction to a prior misleading statement” “*is* the loss causation requirement”). As the Supreme Court has held, loss causation issues cannot defeat certification because they are common to the class, and require full fact and expert discovery to resolve. *Amgen Inc. v. Connecticut Ret. Plans & Tr. Funds*, 568 U.S. 455, 475 (2013) (“loss causation [is a] common question”).

Moreover, Defendants’ expert’s opinion that the corrective disclosures “did not reveal anything new” has already been rejected by this Court for purposes of this stage of the litigation. *In re CenturyLink Sales Practices & Sec. Litig.*, 403 F. Supp. 712, 735-36 (D. Minn. July 30, 2019) (“Plaintiffs have adequately pled loss causation [in alleging the truth was revealed through] news reports on the lawsuits alleging systemic cramming at CenturyLink”). And Mr. Deal’s opinion that a restatement or similar admission of wrongdoing is required (Deal-Rpt.¶23) has been repeatedly rejected by courts, including in this case. *See CenturyLink*, 403 F. Supp. 3d at 735-36; *see also Lloyd v. CVB Fin. Corp.*, 811 F.3d 1200, 1210 (9th Cir. 2016). Defendants must await summary judgment or trial to re-litigate these rejected class-wide arguments. *See Goldman*, 955 F.3d at 273-74.

**Third**, Defendants’ loss causation arguments are flatly incorrect. Defendants argue that the disclosures do not demonstrate price impact because they were supposedly influenced by “fear, uncertainty, and doubt” or “FUD”—a concept their expert borrowed from the technology antitrust field. Deal-Rpt.¶108-10; PX-H at 150:4-157:4; Hartzmark-

Rbt. ¶¶55-58. While Mr. Deal offers no empirical or other support for his “FUD” theory, even if Defendants could show that some portion of the decline was driven by “fear”—which they have not even attempted to do—that is “not enough to rebut the *Basic* presumption.” *Goldman*, 955 F.3d at 271; *see also Waggoner*, 875 F.3d at 104-05 (“that another factor *also* contributed” does not rebut price impact). Here, Mr. Deal did not opine that “FUD” alone caused the declines or even assess whether “FUD” was responsible for any portion of them—let alone the *entirety* of them—as required to prevail. PX-H at 84:6-85:23; 162:2-165:21; Hartzmark-Rbt. ¶¶55-58.

**Fourth**, Defendants contend that there is no price impact because general concerns about cramming existed in the market. Deal-Rpt. ¶¶56-58. This is wrong. Defendants’ truth-on-the-market defense cannot defeat class certification because, as the Supreme Court held in *Amgen*, it raises common, class-wide issues. 568 U.S. at 482 (whether truth “entered the market” before disclosures raises “common” issues for trial). In any event, the corrective disclosures here revealed new material information—as the disclosures themselves make clear. ¶¶275-80; PX-H at 85:24-90:5; Hartzmark-Rbt. ¶53, ¶¶24-54.

**Fifth**, Defendants argue a lack of price impact by incorrectly contending the June 19, 2017 decline was not statistically significant. Defendants are wrong. As shown by Dr. Hartzmark, the June 19, 2017 decline is statistically significant at the 94% confidence level using a one-day window, and under both parties’ experts’ event studies, the decline is statistically significant at least a 95% confidence level using a two-day window. Hartzmark-Rbt. ¶94, ¶¶69-70. While Defendants’ expert urges a one-day window, the analysis supporting his opinion failed to consider the disclosure that caused the decline and

a host of other facts he conceded could be “relevant” or “important” to assessing it, and which courts have held justify a two-day window. *See* Hartzmark-Rbt. ¶¶74-94; PX-H at 190:23-212:3; *Southern Co.*, 332 F.R.D. at 394-95.

In any event, the experts’ dispute is academic given that the absence of a statistically significant price movement “does not prove that [the] price was not impacted by the alleged misrepresentations.” *Southern Co.*, 332 F.R.D. at 394-95 (“A non-statistically significant decline simply does not ‘sever the link’”); *Vizirgianakis v. Aeterna Zentaris, Inc.*, 2019 WL 2305491, at \*2 (3d Cir. May 30, 2019). Thus, at best, Defendants’ analysis is irrelevant and, fairly considered, supports—rather than rebuts—price impact.

**Last**, Defendants ignore that the (still developing) evidentiary record demonstrates price impact. For example, Mr. Deal ignores contemporaneous market reaction to the disclosures (Hartzmark-Rbt. ¶¶24-45)—a notable failure for an expert who purports to opine on what was revealed to the market by examining analyst commentary. The analysts Mr. Deal studiously ignores expressed surprise and lowered their targets in response to the disclosures, with one, for example, explaining that an “out-of-the-blue legal risk cropped up when a former employee claimed that the company intentionally overcharges its customers,” which “gained a degree of credibility when Minnesota’s Attorney General filed suit against the company.” Hartzmark-Rbt. ¶42.

Mr. Deal also ignores internal evidence showing, for example, that CenturyLink’s investor relations personnel immediately recognized that “our stock seems to be reacting strongly” to the “Wells Fargo” *Bloomberg* article, with CenturyLink’s PR firm suggesting the Company issue a statement within 15 minutes to halt the decline. Hartzmark-Rbt. ¶34.



Defendants did just that, issuing a statement denying any “unethical behavior”—itself a false statement indistinguishable from those upheld by the Court—that was repeated in other reports (ignored by Defendants’ expert) that potentially cushioned the decline. *See CenturyLink*, 403 F. Supp. 3d at 728; Hartzmark-Rbt. ¶¶74-78. This evidence refutes the notion that the June 19 decline evinces a lack of price impact, that a one-day window is appropriate, or that Defendants’ loss causation defense can be decided prior to trial.

### **B. Defendants Fail To Disprove Front-End Price Impact**

Having failed to disprove back-end price impact, it is unnecessary to consider Defendants’ front-end arguments. *See, e.g., Hatamian*, 2016 WL 1042502, at \*7-8. But Defendants’ front-end impact arguments are similarly meritless.

*First*, Defendants’ core contention—that the absence of statistically significant price increases on certain misrepresentation dates proves a lack of front-end price impact—is without basis. As Defendants’ expert admitted, misstatements or omissions can introduce or maintain artificial inflation in a stock (*i.e.*, can have price impact) regardless of whether a stock’s price increases significantly, decreases significantly, or does neither. PX-H at 123:14-135:18. For this very reason, courts have repeatedly rejected the argument that a lack of a statistically significant price increase shows a misstatement lacked price impact. *See, e.g., Hatamian*, 2016 WL 1042502, at \*7 (“that there was no statistically significant price impact on [16 of 20] misstatement dates” does not show absence of price impact); *see also Di Donato v. Insys Therapeutics*, 333 F.R.D. 427, 444 (D. Ariz. 2019).

Indeed, a cursory review of the Complaint shows why Defendants’ misstatements and omissions here would not necessarily have caused statistically significant price

increases. For example, Plaintiffs allege that Defendants engaged in cramming specifically in order “to *meet* the financial projections Defendants provided to Wall Street” (¶¶2, 67), with internal documents showing that over a half-billion dollars in fees and charges were added to customer bills, including as “*gap closure[s]* so...we could get more \$\$.” ☺ and meet analyst estimates. PX-U at CTLMNSEC00015392; P¶¶6-7. Similarly, the Complaint alleges Defendants omitted negative, material facts (*see, e.g.*, ¶¶200, 203, 225)—which Defendants’ expert agreed would not result in a price increase. *See* PX-H at 135:3-18; Hartzmark-Rbt.¶¶101-03. In other words, Defendants’ own expert concedes the lack of statistically significant price increases on misstatement dates proves nothing.

**Second**, recognizing that an absence of statistical significance does not demonstrate a lack of front-end price impact, Defendants resort to misconstruing the law concerning the well-accepted “price maintenance” doctrine and mischaracterizing Plaintiffs’ Complaint. While Defendants claim courts are “dubious” of this doctrine, the opposite is true. As the Second Circuit recently noted in criticizing a similar argument, securities plaintiffs proceeded on a price maintenance theory in 20 out of 28 (or 71% of) cases following *Halliburton II*—and in all 20, the district court held the defendant failed to rebut the presumption. *Goldman*, 955 F.3d at 266 n.9.<sup>2</sup>

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<sup>2</sup> While Defendants suggest Plaintiffs are now “concocting” a price maintenance theory, this case has always been about Defendants’ “repeated” misrepresentations and omissions concealing CenturyLink’s “years long” cramming—a classic price maintenance fact pattern. *CenturyLink*, 403 F. Supp. 3d at 720; ¶¶194-95, 202, 206, 238-240; *Waggoner*, 875 F.3d at 85-88, 104-05; *Goldman*, 955 F.3d at 258-59, 265-66.

*Last*, Defendants concede that at least four misstatement dates were associated with statistically significant price increases. DB-13-14. While Defendants contend—citing no authority—that these price increases are not enough to show a lack of price impact, courts actually hold the opposite. *See, e.g., W. Palm Beach Police Pension Fund v. DFC Global*, 2016 WL 4138613, at \*14 (price impact argument rejected where analysis showed “statistically positive price movement” on one of 20 misstatement days); *Hatamian*, 2016 WL 1042502, at \*7-8 (statistically significant price increases on four of 20 misstatement days). This alone is fatal. If anything, the four misstatements with statistically significant price increases demonstrates price impact—and certainly does not disprove it. *Waggoner*, 875 F.3d at 101.

Thus, the facts here stand in sharp contrast to those in *IBEW Local 98 Pension Fund v. Best Buy Co., Inc.*, 818 F.3d 775, 780 (8th Cir. 2016) where plaintiffs alleged a single false statement introduced inflation. Rather, this case is like *Waggoner* and *Goldman* (and dozens more), where defendants made repeated misstatements concerning ethics and customer treatment that did not result in price increases on misstatement dates but—like here—the price declined in response to disclosures of an attorney general and SEC lawsuit, respectively. 875 F.3d at 103-04 & n.36 (distinguishing *Best Buy* as having “overwhelming evidence” of a lack of price impact); 955 F.3d at 258-59, 265-66.<sup>3</sup>

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<sup>3</sup> In Defendants’ case, *In re Finisar Corp. Sec. Litig.*, 2017 WL 6026244, at \*8 (N.D. Cal. Dec. 5, 2017), the plaintiffs disclaimed price maintenance while Defendants’ other cases pre-date *Halliburton II* and are inapposite given Defendants here concede significance for certain of the misstatement and disclosure dates. *Cf. In re Moody’s Corp. Sec. Litig.*, 274 F.R.D. 480, 490, 492-93 (S.D.N.Y. 2011) (no statistical increase following misstatement

## II. PLAINTIFFS' CLASSWIDE DAMAGES MODEL SATISFIES *COMCAST*

Defendants next raise the universally-rejected argument that Plaintiffs do not have a way of calculating damages “consistent with their liability case.” DB-23. They agree that the “out-of-pocket method” cited by Dr. Hartzmark applies—and that even their expert’s criticisms of that method raise no individualized issues—but contend that this is insufficient under *Comcast*. *Id.* at 25; PX-H at 213:1-217:13. Defendants are wrong.

To begin, Defendants overstate *Comcast*’s application to securities class actions. *See, e.g., In re Heckmann Corp. Sec. Litig.*, 2013 WL 2456104, at \*14 (D. Del. June 6, 2013) (*Comcast* “was not in regard to a securities fraud litigation, which have generally been certified for class status”). In the context of securities class actions, *Comcast* requires nothing more than plaintiffs set forth a *methodology* capable of measuring damages on a class-wide basis—they are not required to provide a final damages model. *See, e.g., Sykes v. Mel S. Harris & Assocs. LLC*, 780 F.3d 70, 88 (2d Cir. 2015).<sup>4</sup>

Here, Dr. Hartzmark’s “out-of-pocket” approach using an event study is the preeminent method for calculating damages under Section 10(b). It has been accepted by every court to consider it. For example, in *Beaver County Employees’ Retirement Fund v. Tile Shop Holdings, Inc.*, 2016 WL 4098741 (D. Minn. 2016), Judge Montgomery followed nationwide authority to uphold the out-of-pocket method as the “standard and well-settled

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days); *In re Zonagen, Inc. Sec. Litig.*, 322 F. Supp. 2d 764, 780-81 (S.D. Tex. 2003) (same); *see also Hatamian*, 2016 WL 1042502, at \*8 (distinguishing *Moody*’s).

<sup>4</sup> In *Comcast*, an antitrust case, part of plaintiffs’ liability case was dismissed but plaintiffs did not adjust their damages model to even attempt to show consistency with their surviving liability theory. *Comcast Corp. v. Behrand*, 569 U.S. 27 (2013).

formula for assessing damages” in Section 10(b) actions. *Id.* at \*11; *see also, e.g., City of Miami Gen. Emps.’ & Sanitation Emps.’ Ret. Tr. v. RH, Inc.*, 2018 WL 4931543, at \*3 (N.D. Cal. Oct. 11, 2018) (collecting cases). Indeed, there are **over 50** post-*Comcast* securities opinions in which courts accepted the out-of-pocket methodology (PX-N), and multiple courts over the past year have specifically upheld Dr. Hartzmark’s methodology in this exact context. PX-O.<sup>5</sup>

Faced with this contrary authority, Defendants mischaracterize *Comcast* and resort to disputing loss causation. For example, Defendants nit-pick at technical aspects of how Dr. Hartzmark will eventually prove damages, claiming that he has failed to calculate an “inflation ribbon” or adequately address “disaggregation.” DB-26, 28, 30-32. But these are quintessential loss causation disputes that the Supreme Court has held are not appropriate for resolution at class certification. *Halliburton I*, 563 U.S. at 812-15; *Amgen*, 568 U.S. at 475.<sup>6</sup> As Judge Montgomery explained in *Tile Shop*, “[c]oncerns over disentangling loss specific to a corrective disclosure...does not defeat predominance

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<sup>5</sup> Defendants’ case, *In re BP p.l.c. Sec. Litig.*, supports Plaintiffs because there, the court granted certification for claims premised on the out-of-pocket method—but denied certification as to a subclass that “eschew[ed]” that method. 2014 WL 2112823, at \*11-14 (S.D. Tex. May 20, 2014); *see also Hatamian*, 2016 WL 1042502, \*9 (distinguishing *BP*).

<sup>6</sup> Defendants contend that Dr. Hartzmark, a preeminent expert whose opinions have been accepted by courts throughout the country on this issue, “was unable to explain much of anything at his deposition.” DB-28. This is wrong. Dr. Hartzmark repeatedly explained his approach and testified clearly about the out-of-pocket methodology and how it would be applied here. PX-H at 144:19-20 *see also id.* at 81:21-82:3; Hartzmark-Rbt. ¶¶135-37.

because [p]laintiffs are not required to prove loss causation” at the class certification stage. 2016 WL 4098741, at \*11-12; *RH*, 2018 WL 4931543, at \*4.<sup>7</sup>

The smattering of irrelevant cases Defendants cite (DB24) only serves to demonstrate how weak their argument is. Defendants were able to uncover just a handful of cases which mostly do not even involve a Section 10(b) securities class action.<sup>8</sup>

### III. THE *AFFILIATED UTE* PRESUMPTION APPLIES

Plaintiffs are also entitled to a presumption of reliance under *Affiliated Ute*. As Courts in this District have repeatedly and recently recognized in cases just like this one, the *Affiliated Ute* presumption applies where “the ‘thrust’ of the plaintiffs’ allegations is omissions.” *W. Virginia Pipe Trades Health & Welfare Fund v. Medtronic, Inc.*, 325 F.R.D. 280, 288 (D. Minn. 2018); *see also Tile Shop*, 2016 WL 4098741, at \*7 (applying *Affiliated Ute*). Here, the “thrust” of Plaintiffs’ case is Defendants’ failure to disclose its

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<sup>7</sup> *See also Levy v. Gutierrez*, 2019 WL 8405213, at \*11-12 (D.N.H. Sept. 30, 2019) (disaggregation not appropriate at class certification); *Menaldi v. Och-Ziff Cap. Mgmt. Grp., LLC*, 328 F.R.D. 86, 98-99 (S.D.N.Y. 2018) (disaggregation “goes beyond the Rule 23 inquiry”); *La. Mun. Police Emps. Ret. Sys. v. Green Mountain Coffee Roasters, Inc.*, 2017 WL 3149424, at \*7 (D. Vt. July 21, 2017) (rejecting loss causation arguments).

<sup>8</sup> *See Singleton v. Fifth Generation, Inc.*, 2017 WL 5001444, at \*20 (N.D.N.Y. Sept. 27, 2017) (false advertising); *In re Domestic Drywall Anti. Litig.*, 2017 WL 3700999, at \*14 (E.D. Pa. Aug. 24, 2017) (antitrust); *Royal Park Invs. SA/NV v. Wells Fargo Bank, N.A.*, 2018 WL 1831850, at \*8 (S.D.N.Y. Apr. 11, 2018) (contract claims). In both *Ohio Pub. Emps.’ Ret. Sys. v. Freddie Mac*, 2018 WL 3861840, at \*19-20 (N.D. Ohio Aug. 14, 2018) and *Loritz v. Exide Techs.*, 2015 WL 6790247 (C.D. Cal. July 21, 2015) (Wilson, J.), plaintiffs failed to establish efficiency—an element Defendants do not contest here—and are distinguishable on this basis. Further, unlike Dr. Hartzmark, the plaintiffs’ experts in those cases did not tie the damages methodology to the liability theory. *See In re Snap Inc. Sec. Litig.*, 2019 WL 6270291, at \*4-5 (C.D. Cal. Nov. 20, 2019) (Wilson, J.) (distinguishing *Loritz*); *Southern Co.*, 332 F.R.D. at 399-400 (distinguishing *Freddie Mac*).

widespread cramming scheme. *See, e.g.*, ¶2 (“CenturyLink never once disclosed that the Company’s reported revenues could be called into question”); ¶65 (CenturyLink’s “illegal and deceptive practices had a material, undisclosed effect”); ¶¶121-24 (Item 303 disclosures); ¶203 (Defendants “omitted the material fact that the Company’s revenues” were due to cramming). Thus, *Affiliated Ute* applies.<sup>9</sup>

#### IV. OREGON IS ADEQUATE AND TYPICAL UNDER RULE 23

Defendants’ arguments that Oregon is atypical and inadequate are baseless.

*First*, Defendants’ argument that Oregon is atypical because it supposedly had access to nonpublic information about CenturyLink’s fraud is refuted by uncontroverted facts. As the Complaint makes clear, the entity that is Lead Plaintiff in this case *excludes* the Oregon Department of Justice (“DOJ”), the agency that investigated CenturyLink, whose knowledge cannot be imputed to Lead Plaintiff under well-settled law. *See* ¶26; PX-I at 24:23-25, 25:1-10; DB-34-35.<sup>10</sup> Moreover, here, the uncontroverted testimony from Oregon’s Rule 30(b)(6) witness who personally oversaw the CenturyLink

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<sup>9</sup> Defendants wrongly claim that Plaintiffs have not identified any duty to disclose—but Plaintiffs alleged actionable omissions, and the Court sustained them. *See, e.g.*, ¶¶203, 261-63; *CenturyLink*, 403 F. Supp. 3d at 724, 726. Defendants next argue *Affiliated Ute* cannot apply because Plaintiffs allege misrepresentations along with omissions. But as Chief Judge Tunheim explained in *Medtronic*, *Affiliated Ute* is not undermined “simply because a defendant makes misstatements” but rather, if the “omitted facts [were] material...then plaintiffs may employ the *Affiliated Ute* presumption.” *Medtronic*, 325 F.R.D. at 289.

<sup>10</sup> *Brown v. State of Or., Dep’t of Corr.*, 173 F.R.D. 265, 268 (D. Or. 1997) (“Agencies of the State of Oregon are treated as separate entities...knowledge of one agency is not imputed to another”); *Wylar v. Korean Air Lines Co., Ltd.*, 928 F.2d 1167, 1171 (D.C. Cir. 1991) (holding it improper to charge one agency with knowledge of another “simply because both are components of the same...government”).



investments unequivocally establishes that Lead Plaintiff was “not now nor [] ever [] aware of an Oregon Department of Justice investigation of CenturyLink.” PX-I at 208:16-20; *see also* 210:8-211:18; P¶¶2-5; PX-K. The notion that a statewide pension fund like Oregon—the very kind of institutional investor envisioned by Congress—could be deemed inadequate due to the law enforcement activities of a state attorney general statutorily obligated to represent it is antithetical to the PSLRA, and should be rejected.<sup>11</sup>

**Second**, Defendant’s argument that Oregon’s post-disclosure purchases render it atypical has been “consistently rejected” by courts in this District and across the country. *Tile Shop*, 2016 WL 4098741, at \*4; *In re Select Comfort Corp. Sec. Litig.*, 202 F.R.D. 598, 607 n.12 (D. Minn. 2001) (“[c]ourts routinely certify a class with representatives who purchased stock during and after a class period”); *Weiner v. Trivity Health, Inc.*, 2020 WL 467783, at \*3-4 (D. Tenn. Jan. 29, 2020) (collecting cases). The argument is particularly meritless here given that Oregon purchased a mere 2,754 shares after the disclosures, or about 0.18% of the 1,526,778 total shares purchased during the Class Period. *See Tile Shop*, 2016 WL 4098741, at \*5 (that 31% of purchases occurred after disclosures did not impact typicality); DX7.

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<sup>11</sup> That the civil investigative demand Defendants cite was issued *after* the whistleblower lawsuit was made public demonstrates the argument’s lack of merit, as Oregon made no trades after that date until after the end of the Class Period. DX-5; DX-7. Defendants’ contention that Oregon’s investment managers had nonpublic information is similarly baseless given that the “unique data sources” Defendants point to were, in fact, “public information” and “publicly available.” PX-I at 129:5, 130:5-6. Here, the evidence refutes the notion that Oregon had access to nonpublic information. *See, e.g., Tile Shop*, 2016 WL 4098741, at \*5; *Howard v. Liquidity Servs.* 322 F.R.D. 103, 126-27 (D.D.C. 2017) (rejecting typicality argument concerning nonpublic information as unsupported and contrary to the PSLRA).



*Third*, the fact that Oregon did not read specific misstatements does not render it atypical—indeed, the entire premise of the *Basic* presumption is that direct reliance is not required. Moreover, here, Oregon—like many (if not most) large public pension funds—relied on third-party investment managers to make the majority its CenturyLink investments. Whether Oregon or any of its managers read particular documents is irrelevant, as they clearly relied on the price of CenturyLink securities—which establishes *Basic* reliance. See DX6 at 215:8-16; *Tile Shop*, 2016 WL 4098741, at \*5 (reliance on outside manager does not affect typicality).<sup>12</sup>

## V. THE FULL CLASS PERIOD SHOULD BE CERTIFIED

Recognizing that certification is proper, Defendants make a last-ditch attempt to shorten the class period to end on June 16, 2017—the first corrective disclosure—by claiming that the full truth was disclosed on that date. This is meritless.

To start, Defendants’ argument (which relies on a case reversed by the Ninth Circuit on this very point) merely raises *common* truth on the market and loss causation issues. Moreover, the full truth was clearly *not* disclosed by June 16, 2017—given that subsequent disclosures revealed, for example, the Minnesota Attorney General’s findings that “maybe 1 out of 5” customers were quoted correctly—“out-of-the-blue” revelations that prompted analysts to downgrade their ratings. ¶¶163-71; Hartzmark-Rbt.¶28-44; P¶3. Moreover, among other things, the fact that CenturyLink made additional false assurances after the first corrective disclosure demonstrates this loss causation defense cannot be decided prior

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<sup>12</sup> Defendants’ case, *In re GenesisIntermedia, Inc. Sec. Litig.*, 232 F.R.D. 321 (D. Minn. 2005), did not involve *Basic* reliance.

to trial. *See, e.g., Southern Co.*, 332 F.R.D. at 395-96; *Snap*, 2019 WL 6270291, at \*12-13; *Och-Ziff*, 328 F.R.D. at 100.

## VI. CONCLUSION

Plaintiffs respectfully request their motion be granted in full.

DATED: May 4, 2020

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# Exhibit 5

**UNITED STATES DISTRICT COURT  
DISTRICT OF MINNESOTA**

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**IN RE: CENTURLINK SALES  
PRACTICES AND SECURITIES  
LITIGATION**

This Document Relates to:

Civil Action No. 18-296 (MJD/KMM)

**MDL No. 17-2795 (MJD/KMM)**

**DEFENDANTS' SUR-REPLY  
MEMORANDUM OF LAW IN  
OPPOSITION TO PLAINTIFFS'  
MOTION FOR CLASS  
CERTIFICATION AND  
APPOINTMENT OF CLASS  
REPRESENTATIVES AND CLASS  
COUNSEL**

Oral Argument Requested

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### **PRELIMINARY STATEMENT**

The Court should deny Plaintiffs' motion for class certification.

**First**, Defendants have shown, overwhelmingly, that the alleged misrepresentations did not lead to increases in the value of CenturyLink securities, rebutting the *Basic* presumption of reliance. Rather than produce evidence to meet their burden, Plaintiffs ask the Court to disregard Defendants' front-end evidence, claiming:

- Defendants must “prove” a lack of price impact, not just produce evidence;
- Defendants must disprove both front-end and back-end price impact; and
- Defendants' evidence should be ignored because Plaintiffs may resort to a “price maintenance” theory.

But the Eighth Circuit already rejected *each* of these arguments in *IBEW Local 98 Pension Fund v. Best Buy Co., Inc.*, 818 F.3d 775 (8th Cir. 2016). Plaintiffs avoid engaging with *Best Buy* based on a distinction—the number of alleged misstatements—that makes no difference, and instead cherry-pick their preferred standard from other jurisdictions. Under the clear and controlling law of this circuit, Defendants have rebutted the presumption. In the face of Defendants' contrary evidence, Plaintiffs do not even try to carry their burden to show it is more likely that the element of reliance is common to all class members under Rule 23. In short, *Best Buy* unequivocally precludes class certification here.

**Second**, Plaintiffs' failure to marry their damages methodology to their theory of liability remains fatal under *Comcast*.

## ARGUMENT

### **I. DEFENDANTS HAVE REBUTTED THE *BASIC* PRESUMPTION, AND PLAINTIFFS HAVE FAILED TO OTHERWISE PROVE THE PRICE IMPACT REQUIRED TO SHOW CLASS-WIDE RELIANCE.**

Plaintiffs declined to show that the alleged misrepresentations inflated the value of CenturyLink securities. *See* Dkt. No. 261<sup>1</sup> (Mar. 23, 2020) (“Dr. Hartzmark’s reply report . . . does not attempt to prove price impact.”); June 12 Declaration of Ryan Blair (“Blair Decl.”), Ex. 2 at 16:12-13 (Hartzmark “was not asked to measure . . . price impact.”). Thus, the sole question before this Court is whether Defendants have rebutted the *Basic* presumption of class-wide reliance. Under controlling Supreme Court and Eighth Circuit law, Defendants have.

#### **A. The Demonstrated Absence of Positive Price Reaction to the Alleged Misrepresentations Satisfies Defendants’ Burden.**

##### ***1. Defendants may produce evidence of a lack of price impact to rebut the presumption, but Plaintiffs retain the ultimate burden of persuasion to show reliance is common to the class.***

The core dispute between the parties is what is required of Defendants to rebut the *Basic* presumption. Plaintiffs represent that Defendants have a “heavy burden” under which they must “completely” disprove price impact. Dkt. No. 249 (Plaintiffs’ “Reply”) at 1. This misrepresents binding Eighth Circuit law holding that defendants need only “produce evidence” contrary to the presumption under Federal Rule of Evidence 301. *Best Buy*, 818 F.3d at 782 (citing Rule 301 and holding “defendants ha[ve] the burden to *come forward with evidence* showing a lack of price impact”); *see Bing Li v. Aeterna*

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<sup>1</sup> All docket citations refer to Civil Action 18-296 (MJD/KMM).

*Zentaris, Inc.*, 324 F.R.D. 331, 344 (D.N.J. 2018) (“the defendant bears the burden of ***producing evidence*** to rebut the presumption”) (citing *Best Buy* and Rule 301).

Plaintiffs conspicuously fail to cite *Best Buy* in describing the operation of the *Basic* presumption. They instead rely on a Second Circuit opinion that explicitly departed from *Best Buy*, stating: “[t]o the extent that the Eighth Circuit imposed only a burden of production on defendants, we disagree with its conclusion.” *Waggoner v. Barclays PLC*, 875 F.3d 79, 103 n.36 (2d Cir. 2017).<sup>2</sup> The Second Circuit’s different interpretation of *Halliburton II* does not overrule *Best Buy* or govern this Court’s analysis.

Under Rule 301, Defendants’ contrary evidence “destroys” the presumption, so Plaintiffs must carry their burden of persuasion on price impact. *Lupyan v. Corinthian Colleges Inc.*, 761 F.3d 314, 320 (3d Cir. 2014); see *Halliburton Co. v. Erica P. John Fund, Inc.*, 573 U.S. 258, 276, 281–82 (2014) (“*Halliburton II*”). Even after submitting two expert reports, Plaintiffs have not done so.

## **2. Front-end evidence alone rebuts the Basic presumption.**

Plaintiffs further argue that to defeat Plaintiffs’ motion, Defendants must “affirmatively disprove both” front-end and back-end price impact. Reply at 2. This also ignores controlling law. *Best Buy* reversed certification of the proposed class on front-end evidence alone—even though there was evidence of back-end impact. 818 F.3d at

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<sup>2</sup> The *Waggoner* court speculated that the Eighth Circuit’s reliance on Rule 301 in *Best Buy* could be “dictum,” *id.*, but in fact, it was the very first part of the Eighth Circuit’s analysis. 818 F.3d at 782.

782–83; *see Halliburton II* at 269 (“**any** showing that severs the link [is] sufficient”); *In re Finisar Corp. Sec. Litig.*, 2017 WL 6026244, at \*7–8 (N.D. Cal. Dec. 5, 2017) (front-end evidence rebutted presumption).<sup>3</sup>

Plaintiffs urge this Court to disregard *Best Buy* because in that case “plaintiffs alleged a single false statement introduced inflation.” Reply at 10. The number of misrepresentations alleged does not change the Eighth Circuit’s holding that front-end evidence suffices to rebut the presumption. If anything, as Plaintiffs allege approximately 200 misrepresentations, the lack of front-end impact is even **more** decisive here.

**3. The alleged misrepresentations did not lead to positive returns in CenturyLink stock value—quintessential evidence of no price impact.**

The undisputed expert evidence shows a clear lack of price impact. The alleged misrepresentations overwhelmingly did not lead to positive price movement and were instead twice as likely to lead to **negative** price movement. For the handful of dates with positive movement, Defendants’ expert identified unrelated positive news, including stock buybacks, strategic sales of corporate assets, and positive revenue surprises in unrelated areas of CenturyLink’s business. *See* Dkt. No. 226 (Defendants’ “Opposition”) at 12–13; Dkt. No. 227, Ex. 1 (Expert Report of Bruce Deal) at ¶¶ 72–76. Plaintiffs’

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<sup>3</sup> Plaintiffs complain that the *Finisar* plaintiffs did not pursue a price maintenance theory, Reply at 10 n.3, but that court found front-end evidence alone sufficient for other reasons. For example, as here, the *Finisar* plaintiffs failed to provide evidence of confounding information on the alleged misrepresentation dates. 2017 WL 6026244 at \*7.

expert performed no independent analysis of those dates. Blair Decl. Ex. 2 at 33:16-21. This does not carry Plaintiffs' burden under *Best Buy*.

Plaintiffs offer three responses, but none move the needle.

**First**, Plaintiffs argue the lack of positive price movement does not “prove[] a lack of front-end price impact.” Reply at 8. This assertion proceeds from a misapprehension of Eighth Circuit law: Defendants need only “**come forward with evidence**” to rebut the *Basic* presumption, not **prove** a lack of impact. *Best Buy*, 818 F.3d at 782. Plaintiffs' argument also contradicts numerous other federal courts. *See in re Chicago Bridge & Iron Co. N.V. Sec. Litig.*, 2020 WL 1329354, at \*3 (S.D.N.Y. Mar. 23, 2020) (“A defendant may rebut the presumption with evidence that the alleged misstatements were not associated with abnormal, positive stock-price returns.”); *Ohio Pub. Emps.' Ret. Sys. v. Federal Home Loan Mortgage Corp.*, 2018 WL 3861840, at \*18 (N.D. Ohio Aug. 14, 2018); *Finisar*, 2017 WL 6026244, at \*6–7.

Plaintiffs would have this Court believe that the only satisfactory front-end evidence would be an event study showing that **none** of the 200 alleged misstatements had **any** positive price impact on **any** of the 52 relevant market days. Reply at 3 (arguing Defendants must “prove a complete absence” of price impact”). This is the highest standard of proof imaginable. But it is not what is required to rebut the *Basic* presumption under *Halliburton II* or *Best Buy*. If those holdings have any force, then the overwhelming evidence Defendants have amassed must rebut the presumption. And

Plaintiffs’ expert admits he did not otherwise prove front-end impact. Blair Decl. Ex. 2 at 26:24-28:21.<sup>4</sup>

**Second**, Plaintiffs argue that Defendants’ evidence is insufficient because Plaintiffs are offering (now, anyway) a “price maintenance” theory, and claim “this case has always been about Defendants’ ‘repeated’ misrepresentations and omissions.” Reply at 9. The Eighth Circuit has already rejected this argument too. *Best Buy*, 818 F.3d at 783; *see Ohio Pub.*, 2018 WL 3861840, at \*18 (citing *Best Buy* and ruling that “[a] theory that statements maintained an inflated stock price is not evidence that can refute otherwise overwhelming evidence of no price impact.”).<sup>5</sup> And Plaintiffs’ own expert says this case is **not** just about repeat misstatements and omissions. Hartzmark identified 26 of the 52 relevant market dates on which he “would not expect” the alleged misrepresentations to have positive price impact—but as to the 26 others (the “Purported Inflationary Dates”), Hartzmark opined that the misrepresentations “might reasonably be expected to evince a positive price movement.” Dkt. No. 252-1 (“Hartzmark Reply

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<sup>4</sup> For an extended part of his deposition, Hartzmark refused to make clear the scope of his price impact opinions, repeatedly offering lengthy, non-responsive answers in response to yes-or-no questions. Blair Decl. Ex. 2 at 12:3-28:21.

<sup>5</sup> The Second Circuit case Plaintiffs cite for the proposition that no district court since *Halliburton II* has rejected this theory, *Arkansas Teacher Ret. Sys. v. Goldman Sachs Grp., Inc.*, 955 F.3d 254, 266 n.9, relied on a law journal note which acknowledged that in *Best Buy*, “the Eighth Circuit declined to apply the price-maintenance theory.” *Congress, the Supreme Court, and the Rise of Securities-Fraud Class Actions*, 132 Harv. L. Rev. 1067, 1088 n.66 (2019). The note also omitted *Ohio Pub.*—as do Plaintiffs.

Report”) at ¶ 113<sup>6</sup>; *see also* Dkt. No. 143 (Amended Complaint) at ¶ 281 (alleging Defendants “artificially inflate[d] the price of CenturyLink stock”).

Notably, Hartzmark’s new analysis provides even more evidence of no price impact. While the Purported Inflationary Dates include the four significantly positive returns, they also include seven significantly negative returns. In other words, according to Plaintiffs’ own expert, the allegedly inflationary misrepresentations that entered the market on these 26 dates led to abnormal price *declines* more than a quarter of the time, almost *twice* as often as the abnormal price increases. *See* Blair Decl. Ex. 3 (Hartzmark Reply Report Backup); *id.* Ex. 4 (excerpts of Hartzmark’s abnormal return calculations).

Plaintiffs argue, via their expert, that these disproportionately negative returns “could” be explained by the “contemporaneous disclosure of negative information.” Hartzmark Reply Report at ¶ 113. But Plaintiffs did not identify—never mind analyze—*any* negative confounding information on these dates. Blair Decl. Ex. 2 at 43:4-44:1. Pure speculation is not enough to carry Plaintiffs’ burden of persuasion. *See Finisar*, 2017 WL 6026244 at \*7 (denying certification where plaintiffs did not provide evidence of confounding information in response to lack of positive movement).

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<sup>6</sup> Hartzmark’s report does not specify the “25” Purported Inflationary Dates, a point he repeatedly obfuscated. Blair Decl. Ex. 2 at 34:21-42:9. During Hartzmark’s deposition, Plaintiffs produced new backup for Hartzmark’s report, Blair Decl. Ex. 3, indicating that there are 26 Purported Inflationary Dates. Following more obfuscation, Dr. Hartzmark admitted he does not know whether his report or the belatedly provided backup file is correct. *Id.* at 127:14-134:16.

**Third**, Plaintiffs argue the four positive returns somehow “demonstrate[] price impact.” Reply at 10. But this meager showing cannot overcome Defendants’ evidence. *See Ohio Pub.*, 2018 WL 3861840, at \*13, \*18 (no price impact where there was a positive abnormal return on only one of 23 relevant market dates).<sup>7</sup> And Plaintiffs’ expert admitted there is no evidence that there was positive price impact on these four dates. Blair Decl. Ex. 2 at 46:2-18.

While Hartzmark does opine that four abnormal positive returns are “four times as many as would be expected by chance,” Hartzmark Reply Report at ¶ 115, Hartzmark’s own analysis contradicts this claim. As Hartzmark previously opined: “unanticipated material information is more frequently and more systematically disclosed” on “news days,” leading to higher rates of abnormal returns—in the case of CenturyLink, 59% of the time. Dkt. No. 191-3 at ¶ 68; *id.* at Ex. IX. Because 17 of the Purported Inflationary Dates are “news days,” the average distribution expected “by chance” likely would include *more positive abnormal returns than those among Hartzmark’s Purported Inflationary Dates*.

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<sup>7</sup> Plaintiffs point to two cases granting certification where positive movement was observed on a small number of the dates at issue. Reply at 10. Neither applies here. In *W. Palm Beach Police Pension Fund v. DFC Global*, the court found for plaintiffs on the price maintenance theory rejected by *Best Buy*. 2016 WL 4138613, at \*14 (E.D. Pa. Aug. 4, 2016). Likewise, in *Hatamian v. Advanced Micro Devices, Inc.*, the court assigned defendants the burden of proof rejected by *Best Buy*, and, its ruling was based in part on evidence of positive **back-end** price impact. 2016 WL1042502, at \*7 (N.D. Cal. Mar. 16, 2016).



**4. The Back-End Evidence Further Demonstrates a Lack of Price Impact.**

Defendants have demonstrated that the three alleged corrective disclosures did not serve to “correct” any alleged misrepresentations—clear evidence of no price impact that further rebuts the *Basic* presumption. Opposition at 16–18. Plaintiffs assert this evidence goes only to “loss causation,” Reply at 4–5, but whether the back-end disclosures “corrected” the alleged misrepresentations also goes to price impact. *See Ohio Pub.*, 2018 WL 3861840, at \*18. Defendants have further produced evidence that the allegedly corrective disclosures only introduced uncertainty about CenturyLink’s alleged conduct—which analyst reports confirm. Dkt. No. 227, Ex. 1 at ¶¶ 120, 122. In response, Plaintiffs’ expert has not shown any connection between the allegedly corrective disclosures and the alleged misrepresentations.<sup>8</sup> Blair Decl. Ex. 2 at 76:13-77:15.

In addition, the June 19 disclosure is not statistically significant at the 95% level, Hartzmark’s “scientifically accepted level of certainty.” Dkt. No. 191-3, Appx. D at D-5. Plaintiffs try to avoid this clear defect by advocating for a two-day window, Reply at 6, but courts routinely reject multiple-day windows. *See Erica P. John Fund, Inc. v. Halliburton Co.*, 309 F.R.D. 251, 269 (N.D. Tex. 2015); *In re Intuitive Surgical Sec. Litig.*, 2016 WL 7425926, at \*14 (N.D. Cal. Dec. 22, 2016); *Finisar*, 2017 WL 6026244, at \*7.

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<sup>8</sup> CenturyLink’s internal acknowledgement of the objectively observable price decline on June 16 also does not show that the *Bloomberg* article “corrected” previous misrepresentations, or otherwise demonstrate price impact.

**B. Any Class Period Must End on June 16, 2017.**

Plaintiffs admit that, after June 16, 2017, “the market [understood], as a whole, what was occurring,” Dkt. No. 227, Ex. 6, at 204:3–11, and Plaintiffs have not alleged that any particular misrepresentation remained uncorrected after that date. *See* Opposition at 40–44. Plaintiffs argue that CenturyLink “made additional false assurances” after June 16, Reply at 16, but they do not explain what was “false” or draw any connection to the subsequent disclosures. Class period cut-off is an issue of individual reliance—specifically, price impact—properly decided at the class certification stage. *West Virginia Pipe Trades Health & Welfare Fund v. Medtronic*, 325 F.R.D. 280, 294 (D. Minn. 2018). This Court should decide it now.

**II. THE DISCONNECT BETWEEN PLAINTIFFS’ ALLEGATIONS AND THEIR PROPOSED DAMAGES MODEL IS FATAL UNDER COMCAST.**

*Halliburton II* reaffirmed the application of *Comcast* to 10b-5 certification motions. 573 U.S. at 277; *see Beaver Cty. Emps. Retirement Fund v. Tile Shop Hldgs., Inc.*, 2016 WL 4098741, at \*11 (D. Minn. Jul. 28, 2016) (*Comcast* applies to 10b-5 actions). And contrary to Plaintiffs’ representations, Reply at 11, multiple courts have rejected the “out-of-pocket” methodology in evaluating proposed 10b-5 classes. *See Ohio Pub.*, 2018 WL 3861840, at \*19–20 (out-of-pocket methodology alone could not “establish that damages can be measured on a class-wide basis in a manner consistent with [plaintiff’s] theories of liability”); *Loritz v. Exide Techs.*, 2015 WL 6790247, at \*22

(C.D. Cal. July 21, 2015) (plaintiffs “fail[ed] to show a damages theory tied to their theory of liability under *Comcast*”).<sup>9</sup>

Plaintiffs have shrugged off their obligations under *Comcast*. See Opposition at 25–33. They allege five categories of purported misrepresentations; at least 200 challenged statements that allegedly affected the price of CenturyLink securities on 52 days; and a class period spanning nearly four and a half years. Am. Compl. at 90–123; *id.* at Appx. A. They even allege that the fraud dissipated and then reconstituted in the middle of the class period. *Id.* at ¶¶ 100–114. Meanwhile, CenturyLink’s stock traded between \$41.81 and \$22.24 during the class period. Dkt. No. 191-3, Appx. E. The complexity of the damages analysis necessary in light of these allegations is perhaps unparalleled. Certainly, Plaintiffs and their expert have not identified any comparable case.

Yet even after submitting two reports, Plaintiffs’ expert cannot say whether or how he could apply his “out-of-pocket” method to the facts of this case, instead merely listing generic techniques for designing a damages model. Hartzmark Reply Report at ¶¶ 131–32. But Hartzmark does not say he actually *could* or *would* use any of those techniques. Blair Decl. Ex. 1 at 147:2-4. This does not constitute proof that a classwide damages model can be calculated under Rule 23(b)(3). See *Ohio Pub.*, 2018 WL

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<sup>9</sup> Plaintiffs “distinguish” these 10b-5 cases because the courts *also* found there was a failure to prove market efficiency, Reply at 13, but that does not negate those courts’ holdings under *Comcast*.

3861840, at \*19. Plaintiffs’ refusal to provide any information beyond the term “out-of-pocket” cannot pass the “rigorous analysis” required by *Comcast*.

Plaintiffs attempt to recast these problems as going only to loss causation. Reply at 12. But this is not a case like *Tile Shop*, where defendants were merely concerned about “disentangling loss specific to a [single] corrective disclosure.” 2016 WL 4098741, at \*11-12. Instead, the imbalance here between Plaintiffs’ labyrinthine allegations and their cursory “methodology” is massive—and unsustainable. For Plaintiffs’ methodology to nevertheless prove sufficient here would render *Comcast* a dead letter in securities fraud actions. The predominance requirement has not been satisfied.

### **CONCLUSION**

For the foregoing reasons, the Court should deny Plaintiffs’ motion.<sup>10</sup>

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<sup>10</sup> While this sur-reply addresses only those topics for which Plaintiffs introduced new evidence in their reply, Defendants maintain that the *Affiliated Ute* presumption does not apply, Opposition at 19–23, and Oregon is neither typical nor adequate under Rule 23, Opposition at 33–40.

Dated: June 12, 2020

Respectfully submitted,

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# Exhibit 6

**UNITED STATES DISTRICT COURT  
DISTRICT OF MINNESOTA**

IN RE: CENTURYLINK SALES  
PRACTICES AND SECURITIES  
LITIGATION

MDL No. 17-2795 (MJD/KMM)

This Document Relates to:  
Civil File No. 18-296 (MJD/KMM)

**PLAINTIFFS' SUR-SUR-REPLY IN FURTHER SUPPORT OF THEIR MOTION  
FOR CLASS CERTIFICATION**



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## I. INTRODUCTION

This straightforward securities class action—like virtually every other one—is ideally suited for class treatment. Consistent with this reality, Defendants conceded nearly every element of class certification—including that the markets for CenturyLink securities were efficient and that Plaintiffs were entitled to *Basic*’s presumption of reliance.<sup>1</sup>

Defendants’ opposition argued instead that Plaintiffs failed to prove price impact. But it is black letter law that it is ***Defendants***’ burden to disprove price impact. The only evidence Defendants proffered to meet their burden was the opinion of Mr. Deal—who admitted that he was ***not*** opining that there was a lack of price impact, had not been tasked with offering that opinion, and had not done so because he believed, incorrectly, “That’s the plaintiffs’ burden.” Moreover, Mr. Deal conceded his own analysis showed there was “***some impact on the stock price***”—a fact that Plaintiffs’ expert, Dr. Hartzmark, confirmed.

Recognizing that they utterly failed to carry their burden, Defendants filed a sur-reply in an attempt to rehabilitate their opposition. But Defendants’ sur-reply does not move the needle one inch, as it identifies no evidence showing a lack of price impact. Instead, based on a gross misreading of the Eighth Circuit’s decision in *IBEW Local 98 Pension Fund v. Best Buy Co.*, 818 F.3d 775 (8th Cir. 2016), Defendants now contend (after largely ignoring *Best Buy* in the initial briefing) that Mr. Deal’s report is sufficient to meet a minimal burden of “production.” It is not. Not only is Defendants’ mischaracterization of *Best Buy* incorrect, their argument is irrelevant because Defendants’ expert conceded price impact and did not come forward with any evidence of its absence, even under the erroneous standard Defendants advocate.

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<sup>1</sup> Defined terms herein have the same meaning as in Plaintiffs’ Reply (ECF No. 249). All emphasis is added and citations omitted unless noted. Citations to “PX-\_\_” are to the Declaration of Michael D. Blatchley.

## II. DEFENDANTS MUST PROVE A LACK OF PRICE IMPACT

The *Basic* presumption reflects that “the price of stock traded in an efficient market reflects all public, material information—including material misstatements.” *Halliburton Co. v. Erica P. John Fund, Inc.*, 573 U.S. 258, 263 (2014) (“*Halliburton I*”). In *Halliburton II*, the Supreme Court permitted Defendants to rebut the *Basic* presumption by making a “showing that *severs the link* between the alleged misrepresentation and...the price”—*i.e.*, a showing that “the alleged misrepresentation *did not...actually affect* the market price.” *Id.* at 269.

Courts across the country have repeatedly held that to meet this burden, Defendants face the “daunting task” of showing that the “alleged misstatements [had] *no price impact whatsoever*.” *Arkansas Teacher Ret. Sys. v. Goldman Sachs Grp., Inc.*, 955 F.3d 254, 270-71 (2d Cir. 2020); *Monroe Cty. Emps.’ Ret. Sys. v. Southern Co.*, 332 F.R.D. 370, 393 (N.D. Ga. 2019).

To satisfy this “heavy burden,” Defendants necessarily must offer admissible evidence that “the market *in fact* did not respond to the alleged misrepresentations.” *See Di Donato v. Insys Therapeutics, Inc.*, 333 F.R.D. 427, 443-44 (D. Ariz. 2019) (citing *Best Buy* in articulating burden). Thus, while Defendants can attempt to rebut *Basic* by showing a lack of price impact at the “front-end” (when the misstatements are made) and “back-end” (when the truth is revealed), their evidence must conclusively establish “that the market *would not have reacted* had [Defendants] told the truth.” *Goldman*, 955 F.3d at 271-72.

In a concession that they failed to meet this burden, Defendants’ sur-reply attempts to reverse it by mischaracterizing *Best Buy*—which Defendants claim relieved them of their burden to “prove” a lack of price impact and replaced it with a minimal burden of “production.” In Defendants’ world, this does not even require them to offer an expert opinion that price impact is absent—let alone evidence showing it. This is wrong.

First, the Supreme Court specifically instructed (and the Eighth Circuit repeated) that “it is incumbent upon the defendant to show the absence of price impact.” *Best Buy*, 818 F.3d at 781. The Eighth Circuit nowhere purported to announce a different rule than the Supreme Court’s or the one followed by other courts.

To the contrary, *Best Buy* cited with approval (or distinguished on the facts) decisions from the Second and Eleventh Circuit reflecting that *Halliburton II* imposed on Defendants the “burden to **prove** a lack of price impact.” *See Best Buy*, 818 F.3d at 780, 782 (citing *McIntire v. China MediaExpress Holdings, Inc.*, 38 F. Supp. 415, 434 (S.D.N.Y. 2014) and *Local 703 v. Regions Fin. Corp.*, 762 F.3d 1248, 1258-59 (11th Cir. 2014)). Indeed, numerous courts interpreting *Best Buy* since *Halliburton II* have rejected Defendants’ reading, noting that the “Eighth Circuit’s ruling did not depend on the standard of proof” but was instead based on the “overwhelming evidence” of a lack of price impact in that case. *Waggoner v. Barclays PLC*, 875 F.3d 79, 103 n.36 (2d Cir. 2017); *Insys Therapeutics*, 333 F.R.D. at 444 (same).

Second, Defendants’ own *Best Buy* cases make clear that it is Defendants’ burden to “**prove**” a lack of price impact. *See In re Chicago Bridge & Iron Company N.V. Sec. Litig.*, 2019 WL 5287980, at \*3 (S.D.N.Y. Oct. 18, 2019), *adopted*, 2020 WL 1329354, at \*9 (S.D.N.Y. Mar. 23, 2020) (defendants bear “burden of persuasion when rebutting the *Basic* presumption and must demonstrate a **complete lack of price impact**”); *Bing Li v. Aeterna Zentaris, Inc.*, 324 F.R.D. 331, 344 (D.N.J. 2018), *aff’d*, 775 F. App’x 51 (3d Cir. 2019) (citing *Best Buy*, holding defendants had burden to “prove” a lack of price impact); *In re Finisar Corp. Sec. Litig.*, 2017 WL 6026244, at \*6-7 (N.D. Cal. Dec. 5, 2017) (citing *Best Buy*, holding “Defendants bear the burden of production and the burden of persuasion”)).<sup>2</sup>

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<sup>2</sup> Defendants misleadingly cite *Chicago Bridge* to suggest Defendants can rebut the presumption by showing a lack of statistically positive price increases on misstatement

Last, every other court to interpret *Halliburton II*—including two in the past three months alone—has confirmed defendants must prove an absence of price impact. *See, e.g., Goldman*, 955 F.3d at 272 n.19 (“Once the shareholders successfully invoke *Basic*...the question is not which side has better evidence, but whether the defendant has rebutted the presumption.”); *SEB Inv. Mgmt. AB v. Symantec Corp.*, 2020 WL 2306490, at \*9 (N.D. Cal. May 8, 2020) (“[D]efendants misconstrue the burden to show no price impact and erroneously place it with plaintiff. The burden is on defendants”); *Aranaz v. Catalyst Pharm. Partners Inc.*, 302 F.R.D. 657 (S.D. Fla. 2014) (“[T]he defendant is burdened with the daunting task of proving that the publicly known statement had no price impact.”).

### III. DEFENDANTS FAIL TO MEET THEIR INVENTED, LOWER STANDARD

In any event, Defendants have not met their own relaxed standard as they failed to produce *any* competent evidence of a lack of price impact. Defendants’ sole evidence is the opinion of their expert, who did *not* opine that the alleged misstatements had no price impact, he was never asked to offer that opinion, and did not did not do so because he incorrectly believed that was Plaintiffs’ job—a position directly at odds with *Halliburton II*. PX-X at 65:13-20.

Instead, Mr. Deal offered only a “preliminary” and “illustrative” analysis that he claimed showed that isolating the effects of the fraud from non-fraudulent stock price drivers would be “complex.” PX-X at 31:9-13; 32:15-23, 33:12-19; Deal-Rpt.¶68. This necessarily means he did not “produce” any evidence of a *lack* of price impact because, naturally, he did not conduct the analysis he claimed was too difficult to perform.

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dates. *Chicago Bridge* rejected that argument, holding that the absence of price increases following confirmatory statements and omissions like those here did *not* show a lack of price impact. *Chicago*, 2019 WL 5287980, at \*19-20. Similarly, *Freddie Mac* is inapposite because plaintiffs there failed to show the *Basic* presumption applied and conceded the misstatements lacked price impact. *See Ohio Pub. Emps. Ret. Sys. v. Fed. Home Loan Mortg. Corp.*, 2018 WL 3861840, at \*18 (N.D. Ohio Aug. 14, 2018).



The only front-end price impact evidence Mr. Deal provided was a chart asserting that statistically significant price increases were observed on four of the 52 days on which Defendants made misstatements. This is not evidence of a lack of price impact. As Mr. Deal conceded at deposition and as recognized by courts nationwide, misstatements that omit material facts, serve to maintain existing artificial inflation, or are accompanied by offsetting bad news, would **not** be expected to cause a price increase—the only metric this analysis tested. PX-X at 123:18-137:20; *Glickenhau & Co. v. Household Int’l, Inc.*, 787 F.3d 408, 415 (7th Cir. 2015) (“[A] stock can be inflated even if the price remains the same or declines after a false statement because the price might have fallen even more.”); *Regions*, 762 F.3d at 1257 (misstatements “designed to prevent a more precipitous decline in the stock’s price” would not cause a price increase); *City of Cape Coral Mun. Firefighters’ Ret. Plan v. Emergent Biosolutions, Inc., HQ*, 322 F. Supp. 3d 676, 690 (D. Md. 2018) (“By logic, if a company persists in withholding material information...a significant change in price would only occur when the truth was revealed and not necessarily when additional misrepresentations are made.”).<sup>3</sup>

Recognizing their expert admitted that a statistically significant price increase is not necessary to show price impact—and thus conceded the validity of the price maintenance doctrine—Defendants now take the extreme position that *Best Buy* somehow disavowed that doctrine. This too is wrong.

To start, *Halliburton II* itself clearly endorsed the price maintenance doctrine, because it involved price-maintaining misstatements. Indeed, the majority cited with

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<sup>3</sup> Defendants’ quibbling about the number of misstatement days on which price increases could be expected only highlights their failure to perform this analysis themselves. ECF No. 267 at 6-8. While Dr. Hartzmark pointed out that price increases would not be expected on at least half of the misstatement days, he did not opine that increases would be expected on the rest, including because of negative contemporaneously-disclosed information (Hartzmark-Rbt. ¶¶113; *see also id.* ¶¶101-13)—a phenomenon Mr. Deal himself highlighted in his report. Deal-Rpt. ¶¶47-52.

approval *Schleicher v. Wendt*—Judge Easterbrook’s seminal opinion endorsing price maintenance. 618 F.3d 679, 684 (7th Cir. 2010). As these and the legion of other decisions rightly explain, there is no basis to differentiate between fraudulent statements that maintain, introduce or increase inflation. *See, e.g., FindWhat Inv’r Grp. v. FindWhat.com*, 658 F.3d 1282, 1316 (11th Cir. 2011) (“There is no reason to draw any legal distinction between fraudulent statements that wrongfully prolong the presence of inflation in a stock price and fraudulent statements that initially introduce that inflation.”); *In re Vivendi S.A. Sec. Litig.*, 838 F.3d 223, 259 (2d Cir. 2016) (same); *Goldman*, 955 F.3d at 264 (same). And *Best Buy* nowhere announced the Eighth Circuit was disavowing this well-settled law. *See, e.g., Chalenor v. Univ. of N. Dakota*, 291 F.3d 1042, 1049 (8th Cir. 2002). To the contrary, *Best Buy* cited three leading Circuit Court decisions upholding the doctrine and distinguished the case before it on the facts, and courts in the Eighth Circuit have continued to ratify price maintenance in post-*Best Buy* decisions.<sup>4</sup>

*Best Buy* was entirely dependent upon the unique facts of that case. There, plaintiffs sought to certify a class based on a single false statement made on an earnings call. *Best Buy*, 818 F.3d at 778. But plaintiffs’ own expert conceded that the earnings call statement was “virtually the same” as defendants’ non-fraudulent statement two hours earlier and “would have been expected to be interpreted similarly by investors.” *Id.* at 778, 782. Nothing like that exists in the record here. Further, in *Best Buy*, unlike here, Defendants’ expert conducted an event study showing that the stock price increased significantly after the non-fraudulent statement, and declined prior to the issuance of the allegedly actionable fraudulent statement made two hours later. As multiple courts have recognized in certifying classes after *Best Buy*, that case is an extreme outlier which was decided on a

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<sup>4</sup> *See Best Buy*, 818 F.3d at 780, 782-83 (citing *Schleicher*, *FindWhat* and *Regions*); *see also, e.g., Beaver Cty. Emps. Ret. Fund v. Tile Shop Holdings, Inc.*, 2016 WL 4098741 (D. Minn. July 28, 2016); *City of Pontiac Gen. Emps. Ret. Sys. v. Wal-Mart Stores, Inc.*, 2016 WL 5400373 (W.D. Ark. Sept. 20, 2016) ; *see also* ECF No. 261, at 1-6.

unique set of facts. Those facts are not remotely similar to the facts here. *See, e.g., Baker v. SeaWorld Entm't, Inc.*, 2017 WL 5885542, at \*11 (S.D. Cal. Nov. 29, 2017) (distinguishing *Best Buy* as involving a “non-fraudulent” statement as opposed to misstatements that actually “prop up” a company’s stock price).

In any event, Defendants’ price maintenance argument is irrelevant, as Plaintiffs’ case also involves misstatements that coincided with statistically positive abnormal returns—what Defendants describe as “quintessential” evidence of price impact. ECF No. 267 at 4. As Dr. Hartzmark explained, three of the misstatement dates with significant price increases coincide with an alleged acceleration of CenturyLink’s cramming, which was alleged to have inflated the financial metrics Mr. Deal highlighted as potentially causing price increases. *See In re CenturyLink Sales Practices & Sec. Litig.*, 403 F. Supp. 3d 712, 725-26 (D. Minn. 2019); Deal-Rpt.¶74-76 (growth in cash flows and consumer revenues). This is evidence of price impact—not an absence of it. Thus, in no event can Defendants carry their burden of showing a “**complete lack of price impact**” in this case.

Indeed, Mr. Deal admitted the corrective disclosures here evidence price impact. As Mr. Deal testified, his analysis of the corrective disclosures showed they “do seem to have...had **some impact on the stock price.**” *See* PX-X at 190:14-21. And Mr. Deal’s theory that “fear, uncertainty, and doubt” was “triggered” by fraud-related stock price declines, which FUD made larger, necessarily means the fraud had price impact. *Id.* at 163:22-164:4; Deal-Rpt.¶23. These admissions distinguish this case from *Best Buy* and end the analysis. *See* Reply at 6-7; *Emergent Biosolutions*, 322 F. Supp. 3d at 690 (expert admission of some impact dispositive).<sup>5</sup>

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<sup>5</sup> Defendants’ own cases undermine their dispute about the significance and event window relating to the June 19 disclosure. *See Chicago Bridge*, 2020 WL 1329354, at \*4 (rejecting “cut-off of a 5% significance”); *Southern*, 332 F.R.D. at 391 (two-day window appropriate).

The few courts that have entertained Defendants’ burden-shifting theory make clear that Defendants’ evidence could never possibly satisfy it. In *Marcus v. J.C. Penney Co.*, 2016 WL 8604331 (E.D. Tex. Aug. 26, 2019), *adopted*, 2017 WL 907996 (E.D. Tex. Mar. 8, 2017), defendants failed to meet a burden of production even though there were *no* front-end price increases on misstatement dates. Rather, because (like here), the stock declined following corrective disclosures, thereby showing price impact, it was “not necessary to reach the question of whether [defendants] also bear the burden of persuasion.” 2016 WL 8604331, at \*7-8; *see also KBC Asset Mgmt. NV v. 3D Sys. Corp.*, 2017 WL 4297450, at \*8 (D. S.C. Sept. 28, 2017) (citing *Best Buy*, holding defendants failed to meet burden of production); *In re BancorpSouth, Inc.*, 2017 WL 4125647, at \*1 (6th Cir. Sept. 18, 2017) (Rule 301 burden not met where misstatements did not result in price increases).

While Defendants complain about the difficulty of satisfying their burden, that complaint is properly directed at Congress and the Supreme Court—not this Court. *See, e.g., Goldman*, 955 F.3d at 269-70, 274; *Aeterna Zentaris.*, 775 F. App’x at 54 (rejecting argument rebutting price impact was “impossible”).<sup>6</sup>

#### IV. THE FULL CLASS PERIOD SHOULD BE CERTIFIED

Reiterating their meritless request to shorten the Class Period, Defendants again ignore their burden to claim that Plaintiffs somehow failed to connect the June 19, 2017 and July 12, 2017 disclosures to “any particular misrepresentation” or demonstrate how they provided new information to the market. This is wrong.

The Complaint connects the second and third corrective disclosures directly to Defendants’ misstatements, describing, for example, that the July 12, 2017 news reports concerning the Minnesota Attorney General’s lawsuit revealed “far more about the scope of CenturyLink’s billing fraud,” including by showing that only “1 out of 5” customers was quoted correctly. ¶¶163-64. Defendants’ own expert conceded investors did not know

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<sup>6</sup> An un rebutted presumption of reliance also applies under *Affiliated Ute*. Reply at 13-14.

these facts prior to this disclosure (PX-X at 87:17-89:25), which prompted a statistically significant decline and caused analysts to downgrade CenturyLink’s stock in light of new revelations concerning the “geographic and financial scope” of its misconduct. Hartzmark-Rbt.¶¶37-43. As another court recently observed, that Defendants conceded the significance of the Class Period-ending corrective disclosure is dispositive, as it shows “that the price had been inflated” prior to that time and “defendants bear the burden” of demonstrating otherwise. *Symantec*, 2020 WL 2306490, at \*9.<sup>7</sup>

## V. DEFENDANTS’ COMCAST ARGUMENT IS MERITLESS

Recycling their rejected *Comcast* arguments, Defendants wrongly argue that Plaintiffs have identified no “comparable case.” Setting aside that Plaintiffs did just that (Hartzmark-Rbt.¶¶138-40), Defendants’ expert admitted that Plaintiffs’ methodology is “common” to all members of the class—conceding it satisfies *Comcast*. PX-X at 215:20-216:20. Defendants’ complaint over the precise *inputs* that will be used in the model—classic disputes over *loss causation* that cannot be decided at this stage—is meritless. *See Symantec*, 2020 WL 2306490, at \*10.<sup>8</sup>

## VI. CONCLUSION

Plaintiffs respectfully request their motion be granted in full.

DATED: June 19, 2020

**BERNSTEIN LITOWITZ BERGER &  
GROSSMANN LLP**

/s/ Michael D. Blatchley

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<sup>7</sup> The facts here are nothing like in *W. Virginia Pipe Trades Health & Welfare Fund v. Medtronic, Inc.*, where there was no dispute investors “already knew the truth” after the first disclosure. 325 F.R.D. 280, 295 (D. Minn. 2018); *cf.* *3D Sys.*, 2017 WL 4297450, at \*8 (refusing to shorten class period where there was an “open question” as to whether “curative information was disclosed after” first disclosure).

<sup>8</sup> Defendants’ futile effort to distinguish *Tile Shop* (and failure to distinguish the dozens of other cases cited by Plaintiffs) and their reliance on two inapposite out-of-circuit outliers only underscores the argument’s lack of merit. *See* Reply at 13, n.7-8.

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# Exhibit 7



**UNITED STATES DISTRICT COURT  
DISTRICT OF MINNESOTA**

IN RE: CENTURYLINK SALES  
PRACTICES AND SECURITIES  
LITIGATION

MDL No. 17-2795 (MJD/KMM)

**Expert Report of Michael L. Hartzmark, Ph.D.**

**January 21, 2020**

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## I. SCOPE OF ENGAGEMENT

1. I have been retained by Court-appointed Co-Lead Counsel (“Counsel”)<sup>1</sup> for the putative Class (the “Class”)<sup>2</sup> in the matter of *In re: CenturyLink Sales Practices and Securities Litigation* to determine whether certain publicly traded securities of CenturyLink, Inc. (“CenturyLink” or the “Company”) — more specifically CenturyLink’s common stock and 7.60% Senior Notes due September 15, 2039 (the “7.6% Note”)<sup>3</sup> — traded in open, well-developed and efficient markets (hereinafter referred to as “efficient markets”)<sup>4</sup> from March 1, 2013 to July 12, 2017, inclusive (the “Class Period”).<sup>5</sup> I have also been asked by Counsel to opine on whether the calculation of damages on a class-wide basis is subject to a common methodology for all Class members in connection with their claims under Section 10(b) of the Exchange Act of 1934 (the “Exchange Act”) and U.S.

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<sup>1</sup> Bernstein Litowitz Berger & Grossmann LLP and Stoll Stoll Berne Lokting & Shlachter P.C.

<sup>2</sup> It is my understanding from Counsel that the proposed Class definition is: “[A]ll persons and entities that purchased or otherwise acquired publicly traded CenturyLink common stock or 7.60% Senior Notes due September 15, 2039, during the period between March 1, 2013 to July 12, 2017, inclusive, and who were damaged thereby,” subject to certain exclusions that are addressed in the Consolidated Securities Class Action Complaint dated June 25, 2018 (the “Complaint”), p. 2.

<sup>3</sup> In combination I refer to these two securities as the “CenturyLink securities.” The 7.6% Notes are defined in the Complaint at ¶27.

<sup>4</sup> The premise of the fraud-on-the-market presumption is that “‘the price of a security traded in an efficient market will reflect all publicly available information about a company,’ so that ‘a buyer of the security may be presumed to have relied on that information in purchasing the security.’” *In re Bridgepoint Educ. Inc. Sec. Litig.*, No. 12-cv-1737, 2015 WL 224631, at \*6 (S.D. Cal. Jan. 15, 2015) (quoting *Amgen, Inc. v. Conn. Ret. Plans & Trust Funds*, 133 S.Ct. 1184, 1190 (2013)).

“The fraud on the market theory is based on the hypothesis that, in an open and developed securities market, the price of a company’s stock is determined by the available material information regarding the company and its business.... Misleading statements will therefore defraud purchasers of stock even if the purchasers do not directly rely on the misstatements.” *Basic Inc. v. Levinson*, 485 U.S. 224, 241-42 (1988) (“*Basic*”) (quoting *Peil v. Speiser*, 806 F.2d 1154, 1160-1161 (3d Cir. 1986)).

<sup>5</sup> Complaint, p. 2.

Securities & Exchange Commission (“SEC”) Rule 10b-5 adopted thereunder (collectively, “Section 10(b)”).<sup>6</sup>

2. I have reviewed the Complaint and assume the allegations are true for purposes of this report. I have made no independent investigation of the issues of liability and loss causation in this case, nor have I been asked to calculate actual damages. My report applies widely-accepted economic, financial and statistical analyses to determine whether the securities discussed herein traded in an efficient market.

3. My report is organized as follows: In Section II, I present my qualifications as an expert. In Section III, I summarize each of my opinions. In Section IV, I describe the concept of market efficiency. In Section V, I offer empirical support for the conclusion that CenturyLink common stock traded in an efficient market during the Class Period by examining the “operational” factors for demonstrating market efficiency set forth in *Cammer v. Bloom*, 711 F. Supp. 1264 (D.N.J. 1989) (“*Cammer*”) and *Krogman v. Sterritt*, 202 F.R.D. 467, 474-78 (N.D. Tex. 2001) (“*Krogman*”). In Section VI, I review the results of statistical tests examining the behavior of CenturyLink common stock price on earnings announcement and other dates collectively over the Class Period. These empirical analyses demonstrate that CenturyLink common stock responded to new, material, Company-specific information, which also supports the conclusion that CenturyLink stock traded in an efficient market. In Section VII, I provide background on corporate bond pricing. In Sections VIII and IX, I analyze the *Cammer/Krogman* operational and price-related factors relevant for the 7.6% Note, which offer empirical support for the conclusion that CenturyLink’s 7.6% Note traded in an efficient market during the Class Period. In Section X, I show that the calculation of damages in this case can be done on a class-wide basis subject to a common methodology for Plaintiffs’ claims under Section 10(b) of the Exchange Act. Section XI provides a summary of my conclusions.

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<sup>6</sup> See Complaint, ¶¶280-290.

## II. QUALIFICATIONS

4. I am President of Hartzmark Economics Litigation Practice, LLC, and prior to this I was a Principal and Director at Navigant Economics (formerly dba Chicago Partners, LLC, a subsidiary of Navigant Consulting, Inc.). Both firms specialize in the application of economics and finance to legal, commercial and regulatory issues, including issues such as those addressed in this report. I also am currently engaged as an independent contractor for the Office of the Attorney General of the State of New Jersey and was previously engaged by the Office of the Attorney General of the State of New York, to assist in investigations of the mortgage-backed securities market.<sup>7</sup>

5. I have served as a testifying and consulting expert in numerous securities class actions. In addition, I have published scholarly articles on a multitude of issues in financial economics including those associated with securities class actions, including the topic of market efficiency. I have spent much of my time as an economic consultant evaluating issues related to market efficiency, including its relation to the certification of securities class actions. My primary focus has been on securities such as common stock, corporate bonds, Treasury and energy futures, swaps, swaptions and options, and asset-backed securities. Recently, my expert reports, which concerned topics including market efficiency, were cited with approval by the respective courts in *In re Signet Jewelers Limited Securities Litigation*, in the United States District Court for the Southern District of New York,<sup>8</sup> *Laurence Rougier, et al. v. Applied Optoelectronics, Inc., et al.*, in the

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<sup>7</sup> “A residential *mortgage-backed security* (MBS) is an instrument whose cash flow depends on the cash flows of an underlying pool of mortgages.” Frank J. Fabozzi and Steven V. Mann, *The Handbook of Fixed Income Securities*, Seventh Edition, McGraw-Hill Education (2005), p. 16 (“Handbook”).

<sup>8</sup> *In re Signet Jewelers Limited Sec. Litig.*, 2019 WL 3001084 (S.D.N.Y. July 10, 2019) at \*20 (finding that “Plaintiff’s burden at this stage is simply to propose a methodology for calculating damages that corresponds to its theory of liability. It has done so here. Dr. Hartzmark’s [damages methodology] purports to ‘us[e] the results of an event study along with the disclosures of firm-specific information’ to measure ‘the level of artificial inflation in the prices of the CenturyLink common stock’ based upon ‘price reactions to disclosures revealing [Defendants’] alleged misstatements and omissions.’ . . . ‘From this, daily levels of inflation can be calculated by adjusting the inflation measure for each day throughout the Class Period.’

United States District Court for the Southern District of Texas,<sup>9</sup> and *In re Cobalt International Energy, Inc. Securities Litigation* (including concerning the market efficiency of corporate bonds in addition to stock), in the United States District Court for the Southern District of Texas.<sup>10</sup> In each of those cases, the district court cited my expert reports in its order certifying a class of holders of common stock and, in the case of *Cobalt*, corporate bonds.<sup>11</sup> I also wrote a series of reports cited in the district court's opinion granting class certification of DVI common stock and corporate bonds in *In re DVI, Inc. Securities Litigation*, 249 F.R.D. 196 (E.D. Pa. 2008), which was affirmed by the Third Circuit. *In re DVI, Inc. Securities Litigation*, 639 F.3d 623 (3d Cir. 2011). Similarly, my expert report in *West Palm Beach Police Pension Fund, et al. v. DFC Global Corp., et al.* was cited with approval and as support in the *DFC* court's order certifying the class.<sup>12</sup> I have also co-authored three law review publications discussing the commonly used empirical tests applicable to securities class actions, including those that are appropriate for corporate bonds.<sup>13</sup>

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This methodology, which applies on a class-wide basis, is capable of measuring the out-of-pocket losses suffered by the Class members.”).

<sup>9</sup> *Laurence Rougier, et al. v. Applied Optoelectronics, Inc., et al.*, No. 4:17-cv-02399, ECF No. 125 (S.D. Tex. Nov. 13, 2019) (“Dr. Hartzmark’s report provides sufficient information to support a finding of a causal relationship between the release of information and AOI stock price and supports a finding of market efficiency.”) (“Thus, Plaintiffs have demonstrated an accepted method for calculating Class Members’ out-of-pocket damages that are consistent with a fraud on the market theory of liability.”), *recommendation adopted*, ECF No. 131 (Dec. 20, 2019).

<sup>10</sup> *In re Cobalt Intl. Energy, Inc., Sec. Litig.*, 2017 WL 2608243 (S.D. Tex. 2017).

<sup>11</sup> *In re Cobalt Intl. Energy, Inc., Sec. Litig.*, 2017 WL 2608243 (S.D. Tex. 2017) at \*5 (finding that “Plaintiffs have provided expert testimony demonstrating, at this class certification stage, that the market for Cobalt Notes was adequately efficient to allow them to rely on the fraud-on-the-market presumption of reliance.”).

<sup>12</sup> *W. Palm Beach Police Pension Fund, et al. v. DFC Global Corp., et al.*, 2016 WL 4138613, at \*13 (E.D. Pa. Aug. 4, 2016) (finding that “Dr. Hartzmark has data underlying his conclusions and [the defendants’ expert] just has noise”).

<sup>13</sup> Michael L. Hartzmark, Cindy A. Schipani, H. Nejat Seyhun, *Fraud on the Market: Analysis of the Efficiency of the Corporate Bond Market*, 2011 Colum. Bus. L. Rev. 654, 654-716 (2011); Michael L. Hartzmark, H. Nejat Seyhun, *The Curious Incident of the Dog That Didn’t Bark and Establishing Cause-and-Effect in Class Action Securities Litigation*, 6 Va. L. & Bus.



6. I earned my B.A. in economics from The University of Michigan and my M.A. and Ph.D. in economics from The University of Chicago. I have taught economics and financial economics in the Department of Economics at The University of Chicago and jointly in the Michigan Business School (now the Ross School of Business) and the Department of Economics at the University of Michigan.

7. At the University of Michigan, I created and taught courses on financial and commodity futures markets. While an Assistant Professor at the University of Michigan, I received a research grant from the University of Chicago Center for the Study of Futures Prices, as well as the John M. Olin Faculty Fellowship to further my research in financial markets. In addition, I published articles in peer-reviewed journals related to financial markets. Prior to my tenure track appointment at the University of Michigan, I was employed as a Financial Economist at the Commodity Futures Trading Commission, Division of Economics and Education.

8. I have been a holder of the Series 7 and 63 registered representative licenses and have served as a Financial Advisor at Fahnstock & Co., Inc. (now Oppenheimer & Co., Inc.). I was also founder and President of DARMA, LLC, a wealth and asset advisory company affiliated with Oppenheimer & Co., Inc.

9. My qualifications, publications, and expert engagements are summarized in detail in my *curriculum vitae*, which is attached to this report as **Appendix A**. Hartzmark Economics Litigation Practice, LLC is being compensated at a rate of \$700 per hour for my work in this matter. My compensation is not dependent on my opinions expressed in this report or the outcome of this matter.

### III. SUMMARY OF OPINIONS

10. Based on my analysis to date, I have formed the following opinions:

**OPINION 1:** Throughout the Class Period, CenturyLink common stock traded in an efficient market. This opinion is based on an analysis of a basket of factors,

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Rev., 415-66 (Winter 2012); Michael L. Hartzmark, H. Nejat Seyhun, *Understanding the Efficiency of the Market for Preferred Stock*, 8 Va. L. & Bus. Rev., 149-230 (Spring 2014).

including those set forth in *Cammer* and *Krogman*, which, consistent with the fundamental principles of economics and finance and academic research, indicate that CenturyLink common stock traded in an efficient market.

**OPINION 2:** Throughout the Class Period, CenturyLink’s 7.6% Note traded in an efficient market. This opinion is based on an analysis of a basket of factors, including those set forth in *Cammer* and *Krogman*, which, consistent with the fundamental principles of economics and finance and academic research, indicate that CenturyLink’s 7.6% Note traded in an efficient market.

**OPINION 3:** While I have not been asked to quantify actual damages, the calculations of damages for violations of Section 10(b) of the Exchange Act (and SEC Rule 10b-5) are subject to a common methodology and may be computed on a class-wide basis for both the common stock purchasers and the 7.6% Note purchasers.

11. In reaching these opinions, I have relied upon various materials, which are listed in **Appendix B** and/or are otherwise cited in this report. The research and analysis upon which my opinions are based has been conducted by me with the assistance of personnel working under my direction and supervision. My conclusions are based on information available to me as of the date of this report. I understand that discovery is ongoing, and I may review, evaluate, and analyze relevant material that becomes available to me in the future. I reserve the right to modify my conclusions based on additional information.

#### **IV. BASIS FOR OPINIONS ON EFFICIENCY OF THE MARKET FOR CENTURYLINK SECURITIES**

##### A. Efficient Market Defined

12. A market is defined as being informationally efficient if prices of securities trading in that market reflect all material, publicly available information.<sup>14</sup> Further,

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<sup>14</sup> See Eugene F. Fama, *Efficient Capital Markets: A Review of Theory and Empirical Work*, 25 J. Fin. 383, 383 (1970) (“A market in which prices always ‘fully reflect’ available information is called ‘efficient’”); Eugene F. Fama, *Efficient Capital Markets: II*, 46 J. Fin. 1575, 1575

informational efficiency means that prices of securities rapidly change to reflect new, unanticipated, material, public information. The notion behind efficient markets is that the competition among investors to discover new profit opportunities pushes security prices to reflect all material, publicly available information.

13. The finance literature supports the concept of market efficiency. The father of modern finance and Nobel Prize winner, Eugene Fama, wrote, “We shall conclude that, with but a few exceptions, the efficient markets model stands up well,”<sup>15</sup> and “[i]n short, the evidence in support of the efficient markets model is extensive, and (somewhat uniquely in economics) contradictory evidence is sparse.”<sup>16</sup> In 1991, Professor Fama updated his analysis and wrote, “The empirical literature on efficiency and asset-pricing models passes the acid test of scientific usefulness.”<sup>17</sup> Professor Fama also wrote that “precise inferences about the degree of market efficiency are likely to remain impossible. Nevertheless, judged on how it has improved our understanding of the behavior of security returns, the past research on market efficiency is among the most successful in empirical economics, with good prospects to remain so in the future.”<sup>18</sup>

14. The opinion in *Cammer* articulated five factors used by courts to evaluate whether a market is efficient for the purposes of establishing the presumption of investor reliance articulated by the Supreme Court in *Basic Inc. v. Levinson*, 485 U.S. 224 (1988). The fundamental principles of economics and finance that underlie a large body of academic research published over the past forty years support each factor as an indicator of market efficiency. As explained below, it is important to understand that assessment of market efficiency does not turn on any one single factor; rather, it is an assessment of all

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(1991) (“I take the market efficiency hypothesis to be the simple statement that security prices fully reflect all available information.”).

<sup>15</sup> Fama, *Efficient Capital Markets: A Review of Theory and Empirical Work*, 25 J. Fin. at 383.

<sup>16</sup> *Id.* at 416.

<sup>17</sup> Fama, *Efficient Capital Markets: II*, 46 J. Fin. at 1576.

<sup>18</sup> *Id.* at 1576. See also Eugene F. Fama, *Market efficiency, long-term returns, and behavioral finance*, 49 J. Fin. Econ. 283 (1998); G. William Schwert, *Anomalies and Market Efficiency*, in *Handbook of the Economics of Finance* (G. Constantinides et al., eds., 2003); and Burton G. Malkiel, *The Efficient Market Hypothesis and Its Critics*, 17 J. Econ. Perspectives 59 (2003).

the factors together that allows one to reach the conclusion that a market for a security is efficient. For ease of comprehension, the factors can be separated into two general categories: “operational factors” and “price-related factors.”

**1. *Operational Factors Employed to Evaluate Whether a Security Trades in an Efficient Market***

15. The operational factors examine the trading and arbitrage activity in the market, with the clear understanding that (a) an efficient market is one in which anyone can buy and sell securities; (b) an efficient market is one that has a high level of trading activity, and for which trading information is readily available; and (c) an efficient market can be characterized as a liquid market that can absorb a reasonable amount of trading volume at relatively low trading costs.<sup>19</sup> As a result, the operational factors are used to examine whether there is sufficient liquidity, trading and arbitrage activity, along with widespread information dissemination, such that it can reasonably be expected that the market price for the security is efficient in that it rapidly reflects new information.<sup>20</sup>

16. The operational factors set forth in *Cammer* are:

- (1) average weekly turnover;<sup>21</sup>
- (2) analyst coverage;<sup>22</sup>

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<sup>19</sup> Economists often suggest that, “The common metrics of liquidity are turnover, bid-ask spread, and transactional size.” This is also consistent with the operational *Cammer* factors. Handbook, p. 363.

<sup>20</sup> “In an open and developed market, the dissemination of material misrepresentations or withholding of material information typically affects the price of the stock, and purchasers generally rely on the price of the stock as a reflection of its value.” *Peil v. Speiser*, 806 F.2d 1154, 1161 (3d Cir. 1986).

“Indeed, nearly every court that has considered the proposition has concluded that where materially misleading statements have been disseminated into an impersonal, well-developed market for securities, the reliance of individual plaintiffs on the integrity of the market price may be presumed.” *Basic*, 485 U.S. 244 at 247.

<sup>21</sup> “Turnover measured by average weekly trading of two percent or more of the outstanding shares would justify a strong presumption that the market for the security is an efficient one; one percent would justify a substantial presumption.” *Cammer*, 711 F. Supp. at 1286.

<sup>22</sup> “...[I]t would be persuasive to allege a significant number of securities analysts followed and reported on a company’s stock during the class period.” *Id.* See also *Teamsters Local 445 Freight Div. Pension Fund v. Bombardier, Inc.*, 546 F.3d 196, 205 (2d Cir. 2008) (“[T]he

- (3) number of market makers or dealers of the common stock, along with arbitrageurs;<sup>23</sup> and
- (4) the issuer's eligibility to file SEC Form S-3 and to incorporate by reference other SEC Forms.<sup>24</sup>

17. The court in *Krogman* suggested three additional operational factors:

- (1) the market capitalization of the security;<sup>25</sup>

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greater the number of securities analysts following and reporting on a company's stock, the greater the likelihood that information released by a company is being relied upon by investors.") (quoting *In re Xcelera.com Sec. Litig.*, 430 F.3d 503, 514 (1st Cir. 2005)).

<sup>23</sup> "[I]t could be alleged the stock had numerous market makers. The existence of market makers and arbitrageurs would ensure completion of the market mechanism; these individuals would react swiftly to company news and reported financial results by buying or selling stock and driving it to a changed price level." *Cammer*, 711 F. Supp. at 1286-87.

Related to arbitrage activity, some courts have also suggested that other factors may be relevant to determining whether a market is efficient for class-certification purposes, including the activity and number of institutional investors. For example, in *In re Enron Corporation Securities, Derivative & "ERISA" Litigation*, 529 F. Supp. 2d 644, 756 (S.D. Tex. 2006), the court decided that the Enron bonds traded in efficient markets partially based on "data on institutional holdings . . . [that] there was active trading . . . during the Class Period, [and] there were a substantial number of institutional investors."

"Consistent with the efficiency indicators used recently by the courts, the inefficient firms have lower mean trading volume, fewer market makers, lower analyst following, and lower institutional ownership (number and percentage) than efficient firms." Brad M. Barber, Paul A. Griffin, and Baruch Lev, *The Fraud-on-the-Market Theory and the Indicators of Common Stocks' Efficiency*, 19 J. Corp. L., 285-312, 302 (Winter 1994) (footnote omitted and emphasis added).

<sup>24</sup> "... [I]t would be helpful to allege the Company was entitled to file an S-3 Registration Statement in connection with public offerings or, if ineligible, such ineligibility was only because of timing factors rather than because the minimum stock requirements set forth in the instructions to Form S-3 were not met." *Cammer*, 711 F. Supp. at 1287. *See also id.* at 1271 n.5 ("Generally speaking, it is the largest and most well-known companies which register equity securities on Form S-3"); *id.* at 1284 (quoting SEC Securities Act Release No. 6235, 45 FR 63,693 (1980)) ("This form [S-3] is predicated on the Commission's belief that the market operates efficiently for these companies, *i.e.*, that the disclosure in Exchange Act reports and other communications by the registrant, such as press releases, has already been disseminated and accounted for by the market place.") (Emphasis omitted).

<sup>25</sup> In *Krogman*, the court suggested that "[m]arket capitalization, calculated as the number of shares multiplied by the prevailing share price, may be an indicator of market efficiency because there is a greater incentive for stock purchasers to invest in more highly capitalized corporations." 202 F.R.D. at 478.

- (2) the bid-ask price spread;<sup>26</sup> and
- (3) the float of the security (*i.e.*, the amount of outstanding security not held by insiders of the corporation).<sup>27</sup>

## **2. Price-Related Factors Employed to Evaluate Whether a Security Trades in an Efficient Market**

18. The price-related factors are used to examine whether the market price for the security rapidly reflects unanticipated information about future Company cash flows as would be expected in an efficient market.

19. To examine the market efficiency of CenturyLink's securities, I test whether:

- (1) there is a rapid price reaction to new information relevant to the valuation of the securities;<sup>28</sup> and
- (2) there are certain statistical properties associated with security price movements, such as the lack of economically meaningful autocorrelation.<sup>29</sup>

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<sup>26</sup> See *Krogman*, 202 F.R.D. at 478 (“A large bid-ask spread is indicative of an inefficient market, because it suggests that the stock is too expensive to trade.”).

<sup>27</sup> Insiders cannot freely trade in the stock of their firm based on their privileged, nonpublic information. They are subject to both trading restrictions (blackout periods, and restrictions of Rule 10b-5 and Exchange Act Sections 16(b) and 16(c)) and the reporting requirements of Section 16(a). See 17 C.F.R. § 240.10b-5 (2011); 15 U.S.C. §§ 78p(b), 78p(c), 78p(a) (2011). “In determining efficiency, courts also consider the percentage of shares held by the public, rather than insiders.” *Krogman*, 202 F.R.D. at 478.

<sup>28</sup> “[I]t would be helpful to a plaintiff seeking to allege an efficient market to allege empirical facts showing a cause and effect relationship between unexpected corporate events or financial releases and an immediate response in the stock price.” *Cammer*, 711 F. Supp. at 1287.

<sup>29</sup> “Autocorrelation is usually found in time-series data. Economic time series often display a ‘memory’ in that variation is not independent from one period to the next.” William H. Greene, *Econometric Analysis* 358 (2d ed. 1993). In other words, autocorrelation is the measurement of the relationship between the security return at time *t* and the return of the same security at some fixed time in the past. First-order autocorrelation would be found when there is a statistically significant relationship between the common stock return today and the common stock return yesterday. Another way of looking at this concept is that if an observer can use the return from yesterday to predict with some level of certainty the return today, there exists autocorrelation. The absence of autocorrelation is an indicator of market efficiency. See *Lehocky v. Tidel Techs., Inc.*, 220 F.R.D. 491, 506-507 n.20 (S.D. Tex. 2004) (noting that both parties’ experts agreed on the helpfulness of an autocorrelation analysis).

### 3. *Evaluating Operational and Price-Related Factors*

20. Professor Fama’s conclusion that “precise inferences about the degree of market efficiency are likely to remain impossible,” as well as other academic research in economics and finance, support an approach whereby the above factors should be used as a basket of indicators of the efficiency of the security, but—as previously noted—by no means is it necessary that each factor in that basket specifically offer support in order for efficiency to be demonstrated. Judicial analysis of market efficiency reflects this recognition. For instance, the Second Circuit recently held that market efficiency may be demonstrated where the operational factors support that conclusion, even if the price-related factor does not.<sup>30</sup> In so holding, the Second Circuit noted, “The *Cammer* and *Krogman* factors are simply tools to help district courts analyze market efficiency in determining whether the *Basic* presumption of reliance applies in class certification decision-making. But they are no more than tools in arriving at that conclusion, and certain factors will be more helpful than others in assessing particular securities and particular markets for efficiency.”<sup>31</sup>

21. In forming my opinion that CenturyLink’s securities traded in efficient markets throughout the Class Period, I have considered each of these operational and price-related factors. Moreover, even though the *Cammer/Krogman* factors were initially

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Economically meaningful autocorrelation is serial correlation of security returns that is systematic and persistent over time and is large enough to enable a naïve investor to earn economic profits after accounting for transactions costs.

<sup>30</sup> *Waggoner v. Barclays PLC*, 875 F.3d 79, 98 (2d Cir. 2017), *cert. denied*, 138 S. Ct. 1702, (2018).

<sup>31</sup> *Id.* See also *Carpenters Pension Trust Fund of St. Louis v. Barclays PLC*, 310 F.R.D. 69, 83 (S.D.N.Y. 2015) (“The vast majority of courts have used the *Cammer* factors as ‘an analytical tool rather than as a checklist.’ Indeed, not even the *Cammer* court considered the fifth factor necessary, stating only that ‘it *would be helpful* to a plaintiff seeking to allege an efficient market.’”) (emphasis in original, footnotes omitted).

“Different contexts require courts to place greater importance on some factors than on others. No other court has adopted a per se rule that any one factor is dispositive. At the same time, courts have found market efficiency in the absence of an event study or where the event study was not definitive.” *Id.* at \*34 (footnote omitted).

“It is widely accepted that analysis of the *Cammer* and *Krogman* factors is a reliable and accepted methodology for establishing market efficiency.” *Id.* at \*49 (footnote omitted).



developed to evaluate the market for common stock, academics and courts have utilized them to evaluate all types of financial instruments, including corporate bonds.<sup>32</sup>

## V. ANALYSIS OF OPERATIONAL FACTORS OF CENTURYLINK COMMON STOCK

### A. Background

22. In its Form 10-K filed for the fiscal year ended December 31, 2012, CenturyLink described itself as follows:

We are an integrated communications company engaged primarily in providing an array of communications services to our residential, business, governmental and wholesale customers. Our communications services include local and long-distance, network access, private line (including special access), public access, broadband, data, managed hosting (including cloud hosting), colocation, wireless and video services. In certain local and regional markets, we also provide local access and fiber transport services to competitive local exchange carriers (“CLECs”) and security monitoring. We strive to maintain our customer relationships by, among other things, bundling our service offerings to provide our customers with a complete offering of integrated communications services.

Based on our 13.7 million of total access lines at December 31, 2012, we were the third largest telecommunications company in the United States. We operate almost 75% of our total access lines in portions of Colorado, Washington, Arizona, Minnesota, Florida, North Carolina, Oregon, Iowa, Utah, New Mexico, Missouri and Nevada. We also provide local service in portions of Idaho, Ohio, Wisconsin, Virginia, Texas, Pennsylvania, Montana, Alabama, Nebraska, Indiana, Arkansas, Tennessee, Wyoming, New Jersey, North Dakota, South Dakota, Kansas, Michigan, Louisiana, South Carolina, Illinois, Georgia, Mississippi, Oklahoma and California. In the portion of these

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<sup>32</sup> For example, for academic and court cites, see Michael L. Hartzmark, Cindy A. Schipani, H. Nejat Seyhun, *Fraud on the Market: Analysis of the Efficiency of the Corporate Bond Market*, 2011 Colum. Bus. L. Rev., 654-716 (2011); Michael L. Hartzmark, H. Nejat Seyhun, *Understanding the Efficiency of the Market for Preferred Stock*, 8 Va. L. & Bus. Rev., 149-230 (Spring 2014).



37 states where we have access lines, which we refer to as our local service area, we are the incumbent local telephone company. We also operate 54 data centers throughout North America, Europe and Asia. We define a data center as any facility where we market, sell and deliver either colocation services or multi-tenant managed services, or both.

We were incorporated under the laws of the State of Louisiana in 1968.<sup>33</sup>

23. Throughout the Class Period, CenturyLink common stock was listed on the New York Stock Exchange (“NYSE”) under the “CTL” trading symbol.<sup>34</sup> As of March 1, 2013, the start of the Class Period, CenturyLink had between 609 million and 626 million shares outstanding.<sup>35</sup> The difference between these amounts was related to a share repurchase program that had been authorized by the Board of Directors.<sup>36</sup> Throughout the Class Period, CenturyLink engaged in repurchases of its common stock, repurchasing over 45 million shares in 2013, over 18 million shares in 2014, and over 27 million shares in 2015.<sup>37</sup> As of July 12, 2017, the end of the Class Period, there were approximately 549 million shares outstanding.<sup>38</sup>

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<sup>33</sup> CenturyLink SEC Form 10-K filed March 1, 2013, p. 3.

<sup>34</sup> CenturyLink SEC Forms 10-K filed March 1, 2013 (p. 43) and February 23, 2017 (p. 44).

<sup>35</sup> CenturyLink SEC Form 10-K filed March 1, 2013, cover (“On February 15, 2013, 625,822,780 shares of common stock were outstanding. The aggregate market value of the voting stock held by non-affiliates as of June 30, 2012 was \$24.5 billion.”); CenturyLink SEC Form 10-Q filed May 10, 2013, cover (“On May 2, 2013, there were 609,046,043 shares of common stock outstanding.”).

<sup>36</sup> *See, e.g.*, CenturyLink SEC Form 10-Q filed May 10, 2013, p. 18 (“In February 2013, the Board of Directors authorized us to repurchase up to \$2 billion of our outstanding common stock. During the three months ended March 31, 2013, we repurchased 11.1 million shares of our outstanding common stock in the open market. These shares were repurchased for an aggregate market price of \$386 million, or an average purchase price of \$34.62 per share.”).

<sup>37</sup> CenturyLink SEC Forms 10-Q and 10-K covering periods during the Class Period.

<sup>38</sup> CenturyLink SEC Form 10-Q filed August 7, 2017, cover (“On July 27, 2017, there were 549,609,275 shares of common stock outstanding.”); CenturyLink SEC Form 10-Q filed May 5, 2017, cover (“On April 27, 2017, there were 548,812,063 shares of common stock outstanding.”).

B. Analysis of the Operational Factors

**1. *Cammer Factor I – Average Weekly Trading Volume***

24. The first operational factor is the average weekly turnover of a security. As discussed in the *Cammer* opinion: “Turnover measured by average weekly trading of two percent or more of the outstanding shares would justify a strong presumption that the market for the security is an efficient one; one percent would justify a substantial presumption.”<sup>39</sup> A high trading volume indicates substantial investor interest in the security, and thus increases the likelihood that newly-available public and private information will be rapidly incorporated in the security price through trading.<sup>40</sup> In addition, high volume suggests the possibility that investors will, all other factors staying constant, be able to reap greater profits from any information they may possess because they can more easily participate in the market. This greater profit opportunity from the information they may possess then encourages investors to make greater investments in information gathering and processing. This, in turn, will enhance the informational efficiency of the market.<sup>41</sup>

25. To reliably determine whether the turnover fulfills the *Cammer* criterion, I calculated average weekly turnover over the Class Period, which is equal to the average of the ratio of weekly volume divided by the shares outstanding for that week.<sup>42</sup> **Exhibit I** contains the results of this analysis and shows that for the Class Period a total of 6.3 billion shares traded hands with an average daily volume of 5.7 million shares. The ratio of the

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<sup>39</sup> *Cammer*, 711 F. Supp. at 1286.

<sup>40</sup> Jonathan M. Karpoff, *The Relation between Price Changes and Trading Volume: A Survey*, 22 J. of Fin. and Quantitative Analysis, 109, 112 (1987), surveys the literature on trading volume and absolute price changes. Karpoff documents that higher volume results in greater absolute stock price reactions. See also, Brad M. Barber, Paul A. Griffin, and Baruch Lev, *The Fraud-on-the-Market Theory and the Indicators of Common Stocks’ Efficiency*, 19 J. Corp. L. 285 (Winter 1994).

<sup>41</sup> Larry Harris, *Trading and Exchanges: Market Microstructure for Practitioners* (Oxford University Press, 2003), pp. 70, 205, 215.

<sup>42</sup> The trading volume I utilize for the turnover analysis is the composite daily reported trading volume, which I obtained from Bloomberg. The source for shares outstanding is CenturyLink SEC filings.

average weekly volume to shares outstanding was 4.9% – *substantially more than* the 2% threshold that *Cammer* held “would justify a strong presumption that the market for the security is an efficient one”<sup>43</sup> – and the median was 4.2%.<sup>44</sup> This analysis therefore “justif[ies] a strong presumption that the market for the security is an efficient one.”<sup>45</sup>

26. Not only is CenturyLink’s average weekly turnover almost 2.5 times the level that supports a “strong presumption” of efficiency under *Cammer*, but the average and median weekly turnover measures here are greater than many of the turnover measures calculated in other litigation where the courts found the common stock to trade in an efficient market.<sup>46</sup> The relatively high average weekly turnover of CenturyLink common stock provides substantial evidence supporting the conclusion that CenturyLink common stock traded in an efficient market throughout the Class Period.

## 2. *Cammer Factor II – Analyst Coverage*

27. The second operational factor is the number of security analysts who followed and reported on CenturyLink’s common stock. As discussed in *Cammer*: “It would be persuasive to allege a significant number of securities analysts followed and reported on a company’s stock during the class period.”<sup>47</sup> As more analysts follow and report on a company’s securities, more information about the company is disseminated to a greater number of investors. The presence of such professionals means that more information is

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<sup>43</sup> *Cammer*, 711 F. Supp. at 1286.

<sup>44</sup> These figures include the entire weeks of the start date and end date of the Class Period. In **Exhibit I**, I also provide the analysis excluding the weeks that include the start and end dates of the Class Period, which results in similar average and median weekly turnover rates of 4.9% and 4.2%, respectively.

<sup>45</sup> *Cammer*, 711 F. Supp. at 1286.

<sup>46</sup> See, e.g., *City of Ann Arbor Emps.’ Ret. Sys. v. Sonoco Prods. Co.*, 270 F.R.D. 247, 256 (D.S.C. 2010) (finding a stock with a weekly trading volume of 2.61% to have traded in an efficient market); *In re Mills Corp. Sec. Litig.*, 257 F.R.D. 101, 107 (E.D. Va. 2009) (finding an average weekly trading volume of 2-3.5% indicative of market efficiency).

<sup>47</sup> *Cammer*, 711 F. Supp. at 1286. See also *In Re Xcelera.com Securities Litigation*, 430 F.3d (1<sup>st</sup> Cir. 2005) at 514 (“[T]he greater the number of securities analysts following and reporting on a company’s stock, the greater the likelihood that information released by a company is being relied upon by investors.”).

likely to be reflected in the price of these securities either through increased trading or simply through revaluation of the securities by the market participants.<sup>48</sup>

28. As **Exhibit II** shows, as recorded by Bloomberg during the Class Period, there were between 15 and 22 research analysts with an average of 19 analysts following the Company. Further, there were between 12 and 22 research analysts that were part of the Thomson Reuters I/B/E/S consensus EPS estimate for the current fiscal year.<sup>49</sup> In-depth research analyst coverage included the following entities, among others: Argus Research; Barclays; BMO Capital Markets; Bank of America/Merrill Lynch; CFRA Equity Research (S&P Capital IQ); Citigroup; Cowen & Company; D.A. Davidson; Deutsche Bank; Evercore ISI; Gabelli & Co.; Gordon Haskett; Height Analytics; Jefferies; JP Morgan; Macquarie Research; Morgan Stanley; Morningstar; Nomura; Oppenheimer; Piper Jaffray; Raymond James; RBC Capital Markets; Stifel Nicolaus; SunTrust Robinson Humphrey; UBS; and Wells Fargo Securities.<sup>50</sup> CenturyLink was also covered by debt ratings agencies such as Fitch, Moody's and Standard & Poor's Company.<sup>51</sup> There were an additional 26 technical or other analyst firms that covered CenturyLink and reported results.<sup>52</sup> Thus,

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<sup>48</sup> See, for example, Jill E. Fisch, *The Role and Regulation of the Research Analyst*, Research Handbook on the Economics of Corporate Law, Edgar Elgar Publishing, 2002, pp. 315, 317. ("The role of the research analyst...is to provide information to the marketplace. Analysts enhance capital market efficiency by enabling stock prices to reflect information and by reducing the need for each investor individually to gather and analyze that information. ... Research analysts collect information about specific firms and the overall market. They then package that information for use by investors in trading decisions.").

Michael J. Brennan, Narasimhan Jegadeesh, and Bhaskaran Swaminathan, *Investment Analysis and the Adjustment of Stock Prices to Common Information*, 6 Rev. of Fin. Studs. 799, 800 (1993) ("Recent theory suggests that the number of analysts may have an effect on the speed of adjustment to new information.... this would suggest an association between the number of analysts and the speed of adjustment, if the number of analysts can be regarded as a proxy for the number of informed investors.").

<sup>49</sup> Sources: Bloomberg and S&P Capital IQ.

<sup>50</sup> Based on reports available on the S&P Capital IQ and Thomson Eikon databases.

<sup>51</sup> For example, "S&P rates CenturyLink's notes," SNL Kagan Media & Communications Report, March 20, 2013; "Fitch Rates CenturyLink's Senior Unsecured Notes Offering 'BB+'; Outlook Stable," Business Wire, March 18, 2013, 3:25 p.m.; "Moody's lowers CenturyLink's senior unsecured rating to Ba2; outlook stable," Moody's Investors Service Press Release, March 14, 2013.

<sup>52</sup> Based on reports available on the S&P Capital IQ and Thomson Eikon databases.

there were in excess of 50 analysts reporting on CenturyLink. See **Exhibit III-A** for a listing of the number of reports each year from these analysts. This exhibit shows that there were 228 reports published from March 1, 2013 to December 31, 2013; 284 reports published in 2014; 284 reports published in 2015; 309 reports published in 2016 and 152 reports published from January 1, 2017 through July 12, 2017.<sup>53</sup>

29. The substantial coverage of CenturyLink's stock by analysts can also be observed in analyst participation in conference calls held by CenturyLink. Many of these analysts participated in the regular earnings calls CenturyLink hosted in conjunction with the release of its quarterly financial results throughout the Class Period. CenturyLink held 17 conference calls during the Class Period.<sup>54</sup> On these conference calls, analysts and other investors were able to ask questions about CenturyLink, with an average of eight analysts who actively asked questions on each call.<sup>55</sup> See **Exhibit III-B** for a list of analysts who asked questions on CenturyLink conference calls. There were also 38 investor conferences hosted by analysts during the Class Period at which CenturyLink participated. See **Exhibit III-C** for a list of analysts hosting investor conferences at which CenturyLink participated during the Class Period.

30. The number of analysts following CenturyLink compares favorably to the number following other defendant companies at issue in other cases where the courts concluded that the common stock traded in efficient markets.<sup>56</sup>

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<sup>53</sup> I exclude EVA Dimensions from this count, which issued 340 reports from March 1, 2013 through December 31, 2013.

<sup>54</sup> During the Class Period, CenturyLink held earnings calls after each quarterly earnings release.

<sup>55</sup> Source for conference call transcripts: Bloomberg. The October 31, 2016 conference call on CenturyLink's acquisition of Level3 also included the earnings results for both CenturyLink and Level3.

<sup>56</sup> See, e.g., *Luis Aranaz and Jared Pereira et al., v. Catalyst Pharmaceutical Partners, Inc. et al.*, 302 F.R.D. 657, 669 (S.D. Fla. 2014) (finding at least four different securities analysts following Catalyst supported market efficiency); *Billhofer v. Flamel Techs., S.A.*, 281 F.R.D. 150, 153-54 (S.D.N.Y. 2012) ("*Billhofer*") (finding that eight separate firms issuing reports about Flamel and four additional firms participating in investor conference and more than two dozen articles and press releases being published about Flamel was sufficient to favor a finding of market efficiency).

31. In addition, I have examined the number of research analysts following all the common stocks on the NYSE and NASDAQ at the end of December 2013, 2014, 2015 and 2016. For these companies the average and median number of research analysts covering the companies was ten and seven respectively, to which those covering CenturyLink (*i.e.*, which had, as noted above, an average and median of 19 analysts) compares favorably. Further, as of December 31, 2013, 2014, 2015 and 2016, CenturyLink's analyst coverage was in the 86<sup>th</sup>, 85<sup>th</sup>, 84<sup>th</sup>, and 81<sup>st</sup> percentiles, respectively of all NYSE and NASDAQ common stocks. This means that throughout the Class Period the number of analysts following CenturyLink was greater than 80% of the common stocks on the NYSE and NASDAQ.<sup>57</sup>

32. In addition to the analyst reports, there were numerous press releases, news stories and other media coverage of CenturyLink throughout the 1,595-day Class Period (1,100 trading days). (See **Appendix C** for a chronology of select information releases.) Based on my search criteria, I found approximately 11,500 articles (including approximately 4,500 articles from Bloomberg<sup>58</sup> and 7,000 from Factiva<sup>59</sup>) that discussed CenturyLink.

33. Finally, as a public company, CenturyLink was required to file numerous information disclosures in SEC forms that contain new and possibly material information (*e.g.*, 10-K, 10-Q, Proxy and Registration forms) and others that were related to material changes in the Company (*e.g.*, 8-K).

34. The continuous coverage of CenturyLink by a substantial number of analysts, investment professionals, public press, and financial institutions, along with regular and

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<sup>57</sup> For this analysis, I compared CenturyLink's analyst coverage to that of the common stocks on the NYSE or NASDAQ as of the year ended December 31, 2013, 2014, 2015 and 2016 that have a Bloomberg "Security Type" of "common stock" and "Primary Security Composite Exchange Code" of "US". The Bloomberg data obtained for each member was "Total Analyst Recommendations."

<sup>58</sup> Based on a search of Bloomberg News or Bloomberg First Word articles for ticker "CTL" with medium relevance.

<sup>59</sup> Factiva is a Dow Jones company. For Factiva, I searched all sources for the company code for "CenturyLink Inc." See *infra* note 97.

frequent disclosures by the Company in the form of press releases and SEC filings, provides evidence supporting the conclusion that CenturyLink common stock traded in an efficient market throughout the Class Period.

### **3. *Cammer Factor III – Market Makers and Arbitrageurs***

35. The next operational factor is the presence of market makers and arbitrageurs. As discussed in *Cammer*, “[t]he existence of market makers and arbitrageurs would ensure completion of the market mechanism; these individuals would react swiftly to company news and reported financial results by buying or selling stock and driving it to a changed price level.”<sup>60</sup> This factor, as suggested by the *Cammer* court related to a stock that was traded in the 1980’s over-the-counter market or on the early version of NASDAQ (which, at the time, was not a national exchange, but instead was a reporting network in which transactions in securities are reported to the National Association of Securities Dealers for publication).<sup>61</sup> The *Cammer* court understood that the market-making infrastructure of a stock market is indicative of its efficiency.<sup>62</sup>

36. As explained below, consideration of this factor supports a finding of market efficiency for CenturyLink stock because: (a) the stock was traded on the NYSE; (b) was actively traded by a large group of sophisticated investors;<sup>63</sup> and (c) there were opportunities for arbitrage.<sup>64</sup>

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<sup>60</sup> *Cammer*, 711 F. Supp. at 1286-87. See also *In re Xcelera.com*, 430 F.3d at 515 (quoting Black’s Law Dictionary (8th ed. 2004)) (“A market-maker is ‘one who helps establish a market for securities by reporting bid-and-asked quotations’ (the price a buyer will pay for a security and the price a seller will sell a security)” and a market-maker also “stands ready to buy or sell at these publicly quoted prices.”); *Id.* (quoting *Lehocky v. Tidel Techs., Inc.*, 220 F.R.D. 491, 508 n.24 (S.D. Tex. 2004)); *In Re Polymedica Securities Litigation*, 453 F. Supp. 2d 260, 268 (D.C. Mass 2006) (“A market-maker is ‘[o]ne who helps establish a market for securities by reporting bid-and-asked quotations’ (the price a buyer will pay for a security and the price a seller will sell a security) . . . . A market-maker also ‘stand[s] ready to buy or sell at these publicly quoted prices.’”) (citations omitted).

<sup>61</sup> *Cammer*, 711 F. Supp. at 1271 n.24.

<sup>62</sup> See also *supra* note 23.

<sup>63</sup> *Enron*, 529 F. Supp. 2d at 756.

<sup>64</sup> *PolyMedica*, 453 F. Supp. 2d at 273.



**a) Trading on the New York Stock Exchange (NYSE)**

37. CenturyLink was listed on the NYSE during the Class Period. The NYSE assigns a Designated Market Maker (DMM) to each security traded on the NYSE.<sup>65</sup> The NYSE uses these well-capitalized DMMs to facilitate fair and orderly trading.<sup>66</sup> The structure of the NYSE, including the DMM system, in combination with the requirements for being listed,<sup>67</sup> leads to the presumption by economists and the courts that common stocks traded on the NYSE trade in an efficient market.<sup>68</sup> As *Cammer* itself explained,

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<sup>65</sup> According to the NYSE:

The cornerstone of the NYSE market model is the Designated Market Maker (DMM). DMMs have obligations to maintain fair and orderly markets for their assigned securities. They operate both manually and electronically to facilitate price discovery during market opens, closes and during periods of trading imbalances or instability. This high touch approach is crucial for offering the best prices, dampening volatility, adding liquidity and enhancing value.

DMMs apply their market experience and judgment of dynamic trading conditions, macroeconomic news and industry-specific intelligence, to inform their decisions. A valuable resource for our listed company community, DMMs offer insights, while making capital commitments, maintaining market integrity, and supporting price discovery.

Designated Market Makers, <https://www.nyse.com/market-model> (last visited January 13, 2020).

<sup>66</sup> According to the NYSE: “The NYSE’s unique market model combines leading technology with human judgment to prioritize price discovery and stability over speed for our listed companies. Coupled with our electronic markets, we believe nothing can take the place of human insight and accountability. It’s the human element at NYSE that results in lower volatility, deeper liquidity and improved prices.” Market Model, <https://www.nyse.com/market-model> (last visited January 13, 2020).

<sup>67</sup> See 102.01 Minimum Numerical Standards-Domestic Companies-Equity Listings, [https://nyseguide.srorules.com/listed-company-manual/document?treeNodeId=csh-da-filter!WKUS-TAL-DOCS-PHC-%7B0588BF4A-D3B5-4B91-94EA-BE9F17057DF0%7D--WKUS\\_TAL\\_5667%23teid-4](https://nyseguide.srorules.com/listed-company-manual/document?treeNodeId=csh-da-filter!WKUS-TAL-DOCS-PHC-%7B0588BF4A-D3B5-4B91-94EA-BE9F17057DF0%7D--WKUS_TAL_5667%23teid-4) (last visited January 13, 2020).

<sup>68</sup> “[N]o argument could be made that the [NYSE] is not an efficient market.” *Lapin v. Goldman Sachs & Co.*, 254 F.R.D. 168, 183 (S.D.N.Y.2008).

“In most cases, evidence that a stock trades at high volumes on a large national market, such as the NYSE or NASDAQ, and is followed by a large number of analysts will be sufficient to satisfy the *Basic* presumption on class certification.” *Barclays PLC*, 310 F.R.D. at 83.

“While other courts have been reluctant to conclude that a stock was traded efficiently solely because it was traded on the NYSE or NASDAQ, most courts agree that such listing is a good indicator of efficiency.” *Carpenters Pension Trust Fund of St. Louis, et al. v. Barclays PLC, et al.*, 2015 U.S. Dist. LEXIS 110382 at \*26. “[T]hat CSC has cited no case, and none has been



We think that, at a minimum, there should be a presumption – probably conditional for class determination – that certain markets are developed and efficient for virtually all the securities traded there: the New York and American Stock Exchanges, the Chicago Board Options Exchange and the NASDAQ National Market System.<sup>69</sup>

38. Therefore, the fact that CenturyLink was listed on the NYSE provides evidence that CenturyLink common stock traded in an efficient market throughout the Class Period.

#### b) Arbitrageurs and Institutional Holdings

39. As noted above, some courts have also considered the number and activity of institutional investors, as well as the proportion of their holdings of the common stock as evidence of market efficiency.<sup>70</sup> **Exhibit IV** lists 1,668 institutions that filed SEC Form 13F and other documents, disclosing the combined sizes of their beneficial and non-beneficial ownership positions of CenturyLink common stock during the Class Period.<sup>71</sup>

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found, holding that the NYSE is not an efficient market for shares of common stock traded, as here, in substantial volumes.” *In re Computer Sciences Corp. Securities Litig.*, 288 F.R.D. 112, 119 (E.D. Va. 2012). The court emphasized this point further: “It is not surprising that no other federal courts have concluded that common shares traded on the NYSE are not traded in an efficient market.” *Id.* at 120.

“[T]he federal courts are unanimous in their agreement that a listing on the NASDAQ or a similar national market is a good indicator of efficiency.” *Vinh Nguyen vs. Radiant Pharm. Corp.*, 287 F.R.D. 563, 575 n.7 (C.D. Cal. 2012) (“*Radiant*”) (internal quotations omitted).

<sup>69</sup> *Cammer*, 711 F. Supp. at 1292 (quoting Bromberg & Lowenfels, *Securities Fraud and Commodities Fraud*, § 8.6 (1988)).

<sup>70</sup> *See, e.g., Enron*, 529 F. Supp. 2d at 756.

<sup>71</sup> For securities traded on major U.S. exchanges, such as the NYSE, NASDAQ and AMEX, S&P Capital IQ gathers institutional ownership information via Form 13F filings and other sources. For 13F filings, the SEC’s rules state: “Institutional investment managers that use the United States mail (or other means or instrumentality of interstate commerce) in the course of their business and that exercise investment discretion over \$100 million or more in Section 13(f) securities must file Form 13F. . . . An institutional investment manager is an entity that either invests in, or buys and sells, securities for its own account. For example, banks, insurance companies, and broker/dealers are institutional investment managers. So are corporations and pension funds that manage their own investment portfolios. An institutional investment manager is also a natural person or an entity that exercises investment discretion over the account of any other natural person or entity. For example, an investment adviser that manages private accounts, mutual fund assets, or pension plan assets is an institutional investment

These data show that “there was active trading . . . during the Class Period, [and] there were a substantial number of institutional investors,”<sup>72</sup> including a large group of sophisticated investors, institutional investors and investment advisors, who participated in the market for CenturyLink common stock either on their own behalf or on behalf of other beneficial owners. Further, the top 20 largest institutional holders of CenturyLink common stock (in terms of relative size), as of either December 31, 2013, December 31, 2014, December 31, 2015, or December 31, 2016, held a large proportion of the public float (I also report the position relative to outstanding shares). *See Exhibit V*. This exhibit shows that the aggregate positions of these 31 institutions held between 49% and 54% of the public float (and between 49% and 53% of the outstanding shares) as of the listed dates.

40. The active trading by a large number of sophisticated institutional investors and investment advisors, as well as the large proportion of the float they held offers further evidence that CenturyLink common stock traded in an efficient market throughout the Class Period.<sup>73</sup>

### c) Arbitrage Opportunities and Short Interest

41. Some courts have also examined the issue of arbitrage opportunities by considering whether there is an availability of shares to borrow in order to enter into a short sale.<sup>74</sup> Short selling enables market participants to trade on their perceived negative information about the company even if they do not hold a long position in the stock. Thus, short selling assists in arbitrage activity when it is believed by investors that the stock is possibly mispriced and too high. Short selling activity can therefore impact market prices

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manager. So is the trust department of a bank. A trustee is an institutional investment manager, but a natural person who exercises investment discretion over his or her own account is not an institutional investment manager.” U.S. Securities and Exchange Commission: Division of Investment Management: Frequently Asked Questions About Form 13F, March 15, 2017, <http://www.sec.gov/divisions/investment/13ffaq.htm> (last visited January 13, 2020).

<sup>72</sup> *See, e.g., Enron*, 529 F. Supp. 2d at 756.

<sup>73</sup> *See* note 23. Other courts have noted the level of institutional investors in assessing market efficiency. *See e.g., In re Alstom*, 253 F.R.D. 266, 280 (S.D.N.Y. 2008); *Ann Arbor*, 270 F.R.D. at 251; *Billhofer*, 281 F.R.D. at 153.

<sup>74</sup> *Polymedica Corp. Sec. Litig.*, 453 F. Supp. 2d at 273.

and efficiency because it enables all traders who believe the price is going to decline, even if they do not hold a long position, to sell and possibly affect market prices.

42. The amount of short interest in CenturyLink common stock during the Class Period ranged from 24.1 million shares to 114.9 million shares, with an average short interest of 47.3 million shares. As a percentage of shares outstanding, short interest ranged from 4.2% to 20.9% and, as a percentage of public float, short interest ranged from 4.2% to 21.1%. See **Exhibit VI**. This variation in the supply and demand of short interest suggests that arbitrageurs and traders with negative views on CenturyLink were able to remain active. The empirical results suggest that there was sufficient arbitrage and trading activity, which offers further evidence that CenturyLink common stock traded in an efficient market throughout the Class Period.

#### **4. Cammer Factor IV – SEC Form S-3 Eligibility**

43. Eligibility to register securities on SEC Form S-3 is another factor in the analysis of market efficiency.<sup>75</sup> To be eligible to register on Form S-3, an issuer must (a) be current in its SEC filings for at least 12 months and (b) have a public float of \$75 million.<sup>76</sup>

44. At all times throughout the Class Period, CenturyLink was current in its SEC filings for at least 12 months. Moreover, the dollar value of CenturyLink's public float was almost 240 times the required threshold, easily meeting the SEC's public float

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<sup>75</sup> “Fourth, as discussed, it would be helpful to allege the Company was entitled to file an S-3 Registration Statement in connection with public offerings or, if ineligible, such ineligibility was only because of timing factors rather than because the minimum stock requirements set forth in the instructions to Form S-3 were not met.” *Cammer*, 711 F. Supp. at 1285, 1287.

<sup>76</sup> SEC 1379, “Form S-3, Registration Statement under the Securities Act of 1933, General Instructions,” updated November 2018, at 3.

The Form S-3ASR is an automatic shelf registration statement on Form S-3 filed by a CenturyLink, which by definition was a “Well-Known Seasoned Issuer.” SEC Securities Act Release No. 6235, 45 FR 63,693 (1980)), cited in *Cammer* 711 F. Supp. at 1284 (“This form [S-3] is predicated on the Commission’s belief that the market operates efficiently for these companies, i.e., that the disclosure in Exchange Act reports and other communications by the registrant, such as press releases, has already been disseminated and accounted for by the market place.”) (Emphasis omitted).

requirement.<sup>77</sup> Indeed, CenturyLink filed Forms S-3 on March 19, 2013, March 2, 2015 and July 18, 2016.<sup>78</sup>

45. Thus, this *Cammer* Factor offers further evidence supporting the conclusion that CenturyLink common stock traded in an efficient market throughout the Class Period.

### C. Other Operational Factors to Weigh When Examining Market Efficiency

46. In addition to the operational *Cammer* factors evaluated above, I have also considered additional operational factors that have sometimes been considered by courts. As with the operational *Cammer* factors, these additional operational factors support my conclusion that CenturyLink common stock traded in an efficient market throughout the Class Period.

#### **1. *Krogman Factor I – Market Capitalization***

47. In *Krogman*, the court stated that “[m]arket capitalization, calculated as the number of shares multiplied by the prevailing share price, may be an indicator of market efficiency because there is a greater incentive for stock purchasers to invest in more highly capitalized corporations.”<sup>79</sup>

48. At the start of the Class Period, CenturyLink’s market capitalization was over \$21.8 billion, and it peaked at over \$23.9 billion during the Class Period.<sup>80</sup> Throughout the Class Period the market capitalization of CenturyLink averaged approximately \$17.9 billion. *See Exhibit VII.*

49. CenturyLink’s market capitalization compares favorably to the market capitalization of defendant companies in other cases where courts have concluded that the companies’ common stock traded in efficient markets. Indeed, courts have certified classes

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<sup>77</sup> CenturyLink’s average public float was approximately \$17.9 billion.

<sup>78</sup> Source: SEC EDGAR database (the specific forms filed were S-3D and S-3ASR).

<sup>79</sup> *Krogman*, 202 F.R.D. at 478.

<sup>80</sup> Based on the \$34.89 closing price and approximately 625.8 million shares outstanding as of March 1, 2013; and the \$41.81 closing price and approximately 570.7 million shares outstanding as of November 3, 2014.

involving issuer-defendants with significantly lower market capitalizations than CenturyLink.<sup>81</sup>

50. In addition, on average over the Class Period, CenturyLink's market capitalization as compared to other NYSE and NASDAQ listed common stocks placed it in the 93<sup>rd</sup> percentile. This means that CenturyLink's market capitalization was greater than 93% of the common stocks on the NYSE and NASDAQ.<sup>82</sup> On March 1, 2013, the start of the Class Period, CenturyLink's market capitalization as compared to other NYSE and NASDAQ common stocks placed it in the 95<sup>th</sup> percentile. This means that CenturyLink's market capitalization was greater than 95% of the common stocks on the NYSE and NASDAQ at that time.<sup>83</sup> Further, for an additional comparison, on November 3, 2014, the peak of CenturyLink's market capitalization, CenturyLink's market capitalization as compared to other NYSE and NASDAQ common stocks placed it in the 95<sup>th</sup> percentile. This means that CenturyLink's market capitalization was greater than 95% of the common stocks on the NYSE and NASDAQ at that time.<sup>84</sup> Finally, on July 12,

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<sup>81</sup> Certification has been granted in many class action securities matters where the market capitalization of defendant companies is far lower than the average market capitalization of CenturyLink. See, for example, *In re DVI, Inc. Securities Litigation*, 249 F.R.D. 196 (E.D. Pa. 2008), which was affirmed by the Third Circuit. *In re DVI, Inc. Securities Litigation*, 639 F.3d 623 (3d Cir. 2011), ("The market capitalization of DVI during the Class Period ranged between \$300 million to \$12 million, following DVI's negative disclosures."); *Vinh Nguyen v. Radiant Pharms. Corp.*, 287 F.R.D. 563, 574 (C.D. Cal. 2012) ("The value of stock held by non-affiliates ranged from \$29.5 million to \$73.1 million during the Class Period."); *In Re Netbank, Inc. Securities Litig.*, 259 F.R.D. 656, 672 (N.D. Ga. 2009), ("market capitalization rates range from \$246,386,421.36 to \$432,150,737.31"); *The Pennsylvania Avenue Funds et al. against Inyx Inc., et al.*, 2011 WL 2732544, at \*9 (S.D.N.Y. July 5, 2011), ("the market capitalization was consistently in excess of \$22.4 million throughout the Class Period.")

<sup>82</sup> For this analysis, I compared CenturyLink's market capitalization to that of the common stocks on the NYSE or NASDAQ at the end of each year from 2013 through 2016 that have a Bloomberg "Security Type" of "common stock" and "Primary Security Composite Exchange Code" of "US" (the number of members range from 3,780 to 3,973). The Bloomberg data obtained for each member was "Current Market Cap."

<sup>83</sup> For this analysis, I compared CenturyLink's market capitalization to that of the 3,745 common stocks on the NYSE or NASDAQ as of DATE that have a Bloomberg "Security Type" of "common stock" and "Primary Security Composite Exchange Code" of "US." The Bloomberg data obtained for each member was "Current Market Cap."

<sup>84</sup> For this analysis, I compared CenturyLink's market capitalization to that of the 3,959 common stocks on the NYSE or NASDAQ as of DATE that have a Bloomberg "Security Type" of

2017, the end of the Class Period, CenturyLink's market capitalization as compared to other NYSE and NASDAQ common stocks placed it in the 89<sup>th</sup> percentile.<sup>85</sup> This means that CenturyLink's market capitalization was greater than 89% of the common stocks on the NYSE and NASDAQ at that time.

## **2. *Krogman Factor II – The Size of the Float of CenturyLink Common Stock***

51. Float or public float refers to the number of shares of CenturyLink stock that are not held by insiders of the corporation.<sup>86</sup> Consequently, a larger float relative to the total number of outstanding shares of CenturyLink stock indicates there are a large proportion of CenturyLink shares that are available to non-insiders who can trade without restrictions and profit by trading on new information to the marketplace.

52. On average, insiders held 2.5 million or 0.4% of the average shares outstanding during the Class Period.<sup>87</sup> The public float was thus, on average, approximately 99.6% of CenturyLink's shares during the Class Period. The fact that almost 100% of CenturyLink shares were held by the public offers further support that CenturyLink common stock traded in an efficient market throughout the Class Period.

## **3. *Krogman Factor III – Bid-Ask Spread***

53. The size of the bid-ask spread (*i.e.*, ask quote minus bid quote) for a stock in the market is an indication of the liquidity in the market, and courts have considered it as a factor in determining whether the security trades in an efficient market. In *Krogman*, the

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"common stock" and "Primary Security Composite Exchange Code" of "US." The Bloomberg data obtained for each member was "Current Market Cap."

<sup>85</sup> For this analysis, I compared CenturyLink's market capitalization to that of the 3,829 common stocks on the NYSE or NASDAQ as of DATE that have a Bloomberg "Security Type" of "common stock" and "Primary Security Composite Exchange Code" of "US." The Bloomberg data obtained for each member was "Current Market Cap."

<sup>86</sup> "In determining efficiency, courts also consider the percentage of shares held by the public, rather than insiders." *Krogman*, 202 F.R.D. at 478.

<sup>87</sup> Insider holdings were obtained for directors and officers as a group from CenturyLink's SEC DEF14A filings for 2012-2017.

court stated that, “[a] large bid-ask spread is indicative of an inefficient market, because it suggests that the stock is too expensive to trade.”<sup>88</sup>

54. Here, the low bid-ask spread for CenturyLink common stock supports market efficiency. Using daily closing bid and ask quotes, I calculated the dollar and percentage bid-ask spreads for CenturyLink common stock. The percentage bid-ask spread was calculated as the dollar spread (defined as the ask quote less the bid quote) divided by the average of the bid and ask common stock price quotes. **Exhibit VIII** contains the results of the bid-ask spread analysis for each day of the Class Period. Over the Class Period, the daily average spread expressed in dollars was one cent, which is the smallest “tick” size, while the average daily percentage spread was 0.04% over the Class Period. This small bid-ask spread during the Class Period clearly supports market efficiency, as the market was highly liquid, open to all interested investors and well-developed.<sup>89</sup>

55. These numbers compare favorably to the findings of courts in other cases where the courts concluded that the common stocks traded in efficient markets.<sup>90</sup> Further, they also compare favorably to academic research, which showed that, in 2009, the average CRSP-based bid-ask spreads for all NYSE and AMEX stocks were 1.03%, while for all NASDAQ stocks the average spread was 2.55%.<sup>91</sup> By comparison, the average daily percentage spread for CenturyLink common stock was approximately *one twenty-fifth* the size of the NYSE spreads and *one sixtieth* the size of the NASDAQ spreads.

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<sup>88</sup> *Krogman*, 202 F.R.D. at 478.

<sup>89</sup> Division of Market Regulation: Responses to Frequently Asked Questions Concerning Rule 612 (Minimum Pricing Increment) of Regulation NMS. <https://www.sec.gov/divisions/marketreg/subpenny612faq.htm> (last visited January 9, 2020).

<sup>90</sup> *See Radiant* 287 F.R.D. 563, 574 (finding a much larger bid-ask spread of 0.58 percent supported market efficiency); *In re Scientific-Atlanta*, 571 F. Supp. 2d 1315, 1339 (N.D. Ga. 2007) (finding that a bid-ask spread that “never exceeded 1.9%” weighed heavily in favor of market efficiency); and *Cheney v. Cyberguard Corp.*, 213 F.R.D. 484, 501 (S.D. Fla. 2003) (finding that average daily relative bid-ask spread of 2.44% weighed in favor of market efficiency).

<sup>91</sup> Kee H. Chung and Hao Zhang, *A Simple Approximation of Intraday Spreads Using Daily Data*, 17 J. Fin. Markets, 94, Table 2 (2014). The paper compared data using closing CRSP (Center for Research in Security Prices) prices to intraday data and showed the spreads are very close.



56. In addition, I have examined the percentage bid-ask spreads over four years from December 31, 2013 to December 30, 2016 for all the common stocks on the NYSE and NASDAQ. The mean percentage bid-ask spread for the four years for the approximately 3,865 companies in that set was 0.70%, which was approximately 17 times larger than CenturyLink's percentage bid-ask spread during the Class Period. On average, CenturyLink's percentage bid-ask spread was in the 20<sup>th</sup> percentile of all NYSE and NASDAQ common stocks over the Class Period, which means that CenturyLink's percentage bid-ask spread was *narrower* than 80% of the common stocks on the NYSE and NASDAQ.<sup>92</sup>

57. The size of the bid-ask spread is further evidence offering further support for the conclusion that CenturyLink common stock traded in an efficient market throughout the Class Period.

## **VI. THE PRICE-RELATED FACTORS DESCRIBING MARKET EFFICIENCY OF CENTURYLINK COMMON STOCK**

### **A. Background**

58. What is often referred to as the fifth *Cammer* factor is “a cause and effect relationship between unexpected corporate events or financial releases and an immediate response in the stock price.”<sup>93</sup> As stated in *Cammer*, “[o]ne of the most convincing ways to demonstrate [market] efficiency would be to illustrate, over time, a cause and effect relationship between company disclosures and resulting movements in stock price.”<sup>94</sup> As the *Krogman* court also noted, “in an efficient market, a stock's price remains relatively

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<sup>92</sup> For this analysis, I compared CenturyLink's bid-ask spread to that of the common stocks on the NYSE or NASDAQ as of the end of each year during the Class Period from December 31, 2013 through December 30, 2016 that have a Bloomberg “Security Type” of “common stock” and “Primary Security Composite Exchange Code” of “US” (the number of members ranged from 3,754 to 3,972). The Bloomberg data obtained for each member was daily closing “Bid Price” and “Ask Price.”

<sup>93</sup> *Cammer*, 711 F. Supp. at 1287.

<sup>94</sup> *Cammer*, 711 F. Supp. at 1291.



stable in the absence of news, and changes very rapidly as the market receives new and unexpected information.”<sup>95</sup>

59. Below I present empirical evidence that CenturyLink common stock exhibits the type of cause and effect relationship described in *Cammer* and *Krogman*, which supports a conclusion of market efficiency. First, I compare CenturyLink common stock price movements on “news days” to movements on “no-news” days. Next, I demonstrate that there is no statistically significant autocorrelation of CenturyLink common stock abnormal returns. This demonstrates that CenturyLink’s common stock price reacted quickly to all types of news. Finally, although not necessary to support my conclusions as to the efficiency of the market for CenturyLink common stock, I also analyze whether CenturyLink’s stock price reacted to the alleged corrective disclosures in a manner consistent with the type of response that would be expected in an efficient market. It did, which is also consistent with and further supports my conclusion that CenturyLink’s common stock traded in an efficient market. The empirical results presented below support the conclusion that CenturyLink common stock traded in an efficient market throughout the Class Period.

**B. Price Reaction to Unexpected New Information**

***1. Event Study Methodology Used to Test for Cause and Effect***

60. To detect whether the price of CenturyLink common stock rapidly reacted to disclosures of important unanticipated information, I ran a series of empirical tests using the results from an event study. Event studies are widely used in academia, securities litigation matters and investment practices, and have been a standard statistical procedure used by financial economists for over thirty years. They are generally used to measure the reaction of stock price (and thus that of market participants) to the disclosure of new information. In an event study, generally-accepted statistical methods are used to test whether a stock price movement on a particular date is statistically significant – *i.e.*, is of

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<sup>95</sup> *Krogman*, 202 F.R.D. at 477.

a large enough magnitude to allow a statistician to conclude it is not the consequence of chance.

61. As is explained in detail in **Appendix D**, to determine whether the CenturyLink stock price movement on any given date is statistically significant, I use generally-accepted econometric methods and specify a regression model that removes the outside influences on the stock price movement. I then compare the remaining or residual firm-specific portion of the stock price movement on the date in question to the typical or normal volatility of the company's stock.

62. Finally, as is typical in event studies performed in the context of class certification, I examine the relationship between the magnitudes of the abnormal returns, the statistical significance of those abnormal returns and the unexpected news related to the subject company. In **Appendix C**, I present a voluminous daily chronology including CenturyLink common stock prices, returns, volumes, abnormal returns and levels of statistical significance along with company news obtained via Factiva. This chronology also demonstrates the depth of the media coverage of CenturyLink.<sup>96,97</sup> The abnormal returns and the measures of statistical significance are used in the analyses below.

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<sup>96</sup> During the Class Period, numerous news stories about CenturyLink appeared in leading financial publications, including Bloomberg First Word, Bloomberg News, Associated Press Newswires, Benzinga.com, Business Wire, Canada NewsWire, Dow Jones Institutional News, Dow Jones Newswires, FinancialWire, Moody's Investors Service Press Release, PR Newswire, Reuters News, Reuters Significant Developments, and The Wall Street Journal. As discussed above, the broad dissemination of information about CenturyLink through the media, analyst reports and regular SEC filings is itself evidence supporting the conclusion that CenturyLink common stock traded in an efficient market during the Class Period. *See, e.g., In re HealthSouth Corp. Sec. Litig.*, 261 F.R.D. 616, 635 (N.D. Ala. 2009) ("The extensive coverage of HealthSouth in general and its bonds in particular by investment professionals, public media, and institutional investors reflects that HealthSouth notes traded in an efficient market.").

<sup>97</sup> For the CenturyLink chronology, I compiled lists of SEC filings, analyst reports, and news articles. I compiled the list of all of CenturyLink's SEC filings from March 1, 2013 to July 12, 2017 from the SEC website. The list of analyst reports is based on reports available from the Thomson Eikon and Capital IQ electronic databases. While some other reports may exist, this is a reasonably comprehensive list of the analyst reports issued concerning CenturyLink. For news articles contained in the chronology, I searched Factiva. For Factiva, I searched all sources for the company code for "CenturyLink Inc."

## 2. *Cause and Effect Analysis Examining Days with Earnings News versus Days without Earnings-News – Background*

63. In an efficient market, each disclosure of *unanticipated material* information will be expected to have an impact on the security price. This is why the *Cammer* court concluded, “[I]t would be helpful to a plaintiff seeking to allege an efficient market to allege empirical facts showing a cause and effect relationship between unexpected corporate events or financial releases and an immediate response in the stock price.”<sup>98</sup> In securities litigation, the event study for a single firm as described in detail in **Appendix D** examines the impact on stock prices from a variety of different types of information that is disclosed and disseminated. It is not unusual that over a class period the corporation will announce earnings, dividends, discoveries, new products, management changes, new issues of securities, lawsuits that it files, lawsuits filed against it, projections, regulatory changes that impact its business, and more.

64. In an efficient market, academic research finds that there will be some large price movements not associated with news,<sup>99</sup> and conversely, that there will be news without large price movements. For example, there will often be news without large price movements when a company announces earnings that are in line with expectations. In other words, the news may be important to investors, but the change in mix of information is not sufficiently material to elicit a statistically significant stock price reaction. Similarly,

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<sup>98</sup> *Cammer*, 711 F. Supp. at 1287.

<sup>99</sup> For example, in a 2002 study of the general stock market, Professor Fair observed that in the 4,417 trading days for the S&P 500 Index there were 220 days with abnormal returns. Of these days with significant returns, only 69 days had identifiable events or news. Thus, only 31.4 percent of the days had identifiable news, while 68.6 percent had no identifiable event or news. Notably, Prof. Fair did not conclude that the S&P 500 stocks traded in inefficient markets. *See*, Ray Fair, *Events That Shook the Market*, 75 Jnl. of Bus. 713, 714 (2002).

This result is also consistent with other studies, including an analysis that examined return predictability following large price changes and information releases. In this study the authors looked at all common stocks traded on the NYSE and AMEX from 1990 to 1992 and observed 23,459 events with large abnormal returns (*i.e.*, days for one or more stocks with large price movements). After employing certain defined data filters, the final sample included 4,873 events. They found, “Approximately one-third of the events had public announcements.” Mahesh Pritamani and Vijay Singal, *Return Predictability Following Large Price Changes and Information Releases*, 25 Jnl. of Banking & Fin. 631, 635-636 (2001) (“Pritamani and Singal”).

when a company's disclosure misleads investors by concealing important information and therefore maintains the mix of information already in the market, that disclosure would generally not result in a significant stock price movement, because the nature of the information disclosed would simply (and misleadingly) confirm prior expectations.

65. Furthermore, there are *unobserved factors* that might lead to significant price movements without news. These factors include, among others, unobserved changes in the market's expectations, imperfections in the statistical methods employed to evaluate the systematic cause-and-effect relationships of a single firm over a given period of time, and private trading activity — for example, insider trading, trading in advance of an offering or portfolio rebalancing. These factors all might drive a large price response without a publicly observed cause.

66. Below I present empirical evidence that demonstrates that CenturyLink common stock exhibits the type of cause and effect relationship, described in *Cammer* and *Krogman*, which supports a conclusion that CenturyLink common stock traded in an efficient market. Specifically, I compare CenturyLink common stock price movements on days when there are company earnings announcements (referred to below as “news” days) to common stock price movements on days when there are no company earnings announcements (referred to below as “no-news” days).

67. Earnings disclosures typically (although not always) communicate valuation-relevant information. Such information may or may not be material or unanticipated.<sup>100</sup> What is relevant for an event study is that the *group* of events as a *whole* is characterized as having a greater likelihood of disclosure of material, unanticipated information as compared to all other days. Indeed, in a collective event study, one would not necessarily expect all of the individual days on which events occur to evince statistically significant

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<sup>100</sup> There is a voluminous academic literature examining price responses to earnings releases. The pioneering work was completed by William H. Beaver, *The Informational Content of Annual Earnings Announcements*, 6 Jnl. of Acctg. Res. 67 (1968). See also Daniella Acker, *Implied Standard Deviations and Post-Earnings Announcement Volatility*, 29 Jnl. of Bus., Fin. and Acctg. 429 (2002).

returns.<sup>101</sup> In a collective event study, statistical tests are used to examine whether the incidence rate of statistically significant returns is greater on “news days” – days that are generally more likely to have high information flow – than the incidence rate on no-news days, which are days that are less likely to have high information flow.

68. I use earnings disclosure dates as “news days” because a company’s financial results and forecasts are among the most important considerations market participants utilize in valuing the company’s stock.<sup>102</sup> While not every earnings announcement communicates new, unexpected, and material valuation information, the academic and trade literature in finance notes that unanticipated material information is more frequently and more systematically disclosed on such announcement dates rather than on other dates. Indeed, earnings and revenue announcement dates are a highly studied area of the academic research related to news and price movements. Numerous courts have credited similar analyses using earnings disclosures dates as “news days.”

69. Accordingly, in order to objectively select “news dates” from the collection of CenturyLink disclosures for use in my collective analysis, I examined dates on which CenturyLink announced earnings, earnings guidance, and sales reports and compared

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<sup>101</sup> See ¶64.

<sup>102</sup> As mentioned above, there are a confluence of different types of material, unanticipated information that a company discloses that can impact a stock price. There is a large body of academic literature that studies these different types of non-earnings-related information. In one of the earliest papers, the author states, “Other types of information available to investors may be important to their valuation of securities. For instance, the *Wall Street Journal* routinely reports company announcements of dividend increases, large product sales, earnings forecasts, acquisitions, construction projects, stock splits, labor strikes and quarterly earnings figures. Do these events affect the price, hence volatility, of companies’ securities?” Dale Morse, *Wall Street Journal Announcements and the Securities Markets*, 38 Fin. Analysts Jnl. 69, 69 (1982).

See also, Pritamani and Singal, 644-645 and Table 4, in which the authors “divide the public announcement sample into several subsamples based on the type of news. . . . Seven distinct types of announcements are listed . . . .” They examine the price impact of seven categories of news, including: actual earnings announcements by management; forecast of earnings by management; analyst recommendations; capital structure related information (including stock/debt issues); restructuring related information; general business information (including product related information, business contracts, and joint ventures); and miscellaneous information.

CenturyLink's common stock price movement on those dates to its movement on all other dates in the Class Period.<sup>103</sup>

### **3. Cause and Effect Analysis Examining Days with Earnings News versus All Other Days**

70. To begin, I have taken all 1,100 trading dates within the Class Period and categorized each date based on: (i) the statistical significance/insignificance of the abnormal returns on that day; and (ii) whether or not the date is an earnings or preliminary earnings date. I calculate the number and percentage of days in each of these categories based on CenturyLink news releases and the abnormal returns derived from the regression results in **Appendix E**.

71. To minimize the possibility of including certain dates that might be considered to distort my results, I start with the 1,100 days in the Class Period and eliminate those dates when there are price impacts from alleged corrective disclosures.<sup>104</sup> This leaves me with 1,097 dates for my analysis of news dates versus non-news dates.

72. Of these 1,097 days, there are 17 days throughout the Class Period when there are earnings-related announcements. I use this subset of dates as news dates where, as explained above, my objective criteria suggest that there *could have been* — although not necessarily that there *would have been* — announcements of unanticipated, material news.<sup>105</sup> Therefore, out of the 1,097 examined days within the Class Period, approximately 1.5% (=17/1,097) of the days have such news releases. In **Appendix E**, I have also identified 79 dates with statistically significant abnormal returns during the Class Period of which 77 are included in the 1,097 examined days. Therefore, 7.0% (=77/1,097) of the

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<sup>103</sup> The use of such collective tests comparing price movements on news days to lesser or no-news days is widely used to assess market efficiency. See Paul A. Ferrillo, Frederick C. Dunbar, and David Tabak, *The "Less Than" Efficient Capital Markets Hypothesis: Requiring More Proof from Plaintiffs in Fraud-on-the-Market Cases*, 78 St. John's L. Rev. 81 (2004).

<sup>104</sup> The dates excluded are June 16, 2017, June 19, 2017, and July 12, 2017 (Complaint, ¶¶154, 160, 171).

<sup>105</sup> The impact dates of the 17 earnings dates are: 5/9/2013; 8/8/2013; 11/7/2013; 2/13/2014; 5/8/2014; 8/7/2014; 11/6/2014; 2/12/2015; 5/6/2015; 8/6/2015; 11/5/2015; 2/11/2016; 5/5/2016; 8/4/2016; 10/31/2016; 2/9/2017; and 5/4/2017.

days have statistically significant abnormal returns. The information is summarized in **Exhibit IX**, which shows that out of the 1,097 examined days in the Class Period, there were 10 days with significant returns and news, and 67 days with significant returns and no news that meets my objective criteria.<sup>106</sup> There are only seven news days with non-significant returns, leaving 1,013 days with insignificant returns and no news.

73. I first compare the proportions of significant abnormal returns on news days to those on no-news days. This is done by applying a generally-accepted statistical tests to determine whether there was a statistically significant *difference* between the observed proportions of statistically significant abnormal returns on news days as compared to no-news days. Here, CenturyLink's common stock price exhibited a statistically significant abnormal price reaction on **59%** of news days (10 of 17), compared to **just 6%** of no-news days (67 of 1,080). Thus, I observe significant price reactions on news days **over nine times** more frequently than I observe significant movements on no-news days. The difference between these two rates is highly statistically significant with a p-value of less than 0.0001 using Fisher's Exact Test.<sup>107</sup> Thus, with over 99.99% confidence, I can reject the hypothesis that CenturyLink's stock price reacted no differently on news days (or those dates with expected greater information flow) than on all other days.

74. Next, I utilize a generally-accepted statistical method and assume there is no link between news and statistically significant returns (*i.e.*, the relationship is randomly

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<sup>106</sup> It is expected in an event study where there are limited disclosures that there will be dates with no disclosure and statistically significant abnormal return. As explained in Hartzmark and Seyhun (2012) at pp. 435-445, observing a significant abnormal return, but no news, is NOT evidence that the security trades in an inefficient market. For example, based on the fundamental properties of statistical models it is expected there will be approximately 5% of the dates with the bright line statistical significance of 5%. In this case the percentage is 7.0% or 77 dates (out of 1,097). However, CenturyLink disclosed news on only 17 dates based on the objective criteria, so the maximum number of dates with news is 17 days. Thus, in combination (a) the bright line statistical significance of 5% and thus 77 days with statistically significant returns; (b) the number of days in the Class Period after eliminating corrective disclosures of 1,097; and (c) the fixed number of potential news dates of 17, by the construction of the empirical test and simple math, a minimum of 60 (= 77 - 17) dates must have no disclosure and statistically significant abnormal returns.

<sup>107</sup> Fisher's Exact Test is a statistical significance test used in the analysis of proportions such as the categories discussed above.



determined. This test shows that there is virtually zero chance of observing 10 days with statistically significant abnormal returns when there is news.<sup>108</sup>

75. Finally, I utilize a generally-accepted statistical test to ask and answer the question of what number and percentage of days *I would have expected to find* matching between news and a statistically significant abnormal return, if the two were *unrelated*. Applying this test, I find that, if the news and the statistically significant abnormal returns are unrelated, I would expect to observe only *1.2 days out of the 17 days* when there is a significant abnormal return associated with an identifiable earnings announcement. Thus, the ten days I observe is over eight times the expected number of days if there were no cause-and-effect relationship between stock returns and news.

76. These statistical findings related to the price movements of CenturyLink common stock reject the hypothesis that, throughout the Class Period, CenturyLink stock behaved no differently on news days than on all other days. The test results support my conclusion that CenturyLink-specific information and large price movements of CenturyLink stock during the Class Period were related and cannot be attributed to random volatility, or to market or sector factors. This also clearly provides substantial support for the conclusion that CenturyLink common stock traded in an efficient market throughout the Class Period.

#### ***4. Cause and Effect Analysis Examining Autocorrelation Throughout the Class Period***

77. I have demonstrated above that CenturyLink stock reacted to earnings news, as expected in an efficient market. Next, I demonstrate that it not only reacted as expected to earnings news, but that CenturyLink's common stock price reacted quickly to all types

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<sup>108</sup> To test whether this hypothesis is a reasonable description of the actual world, I use a statistical method employing a generally-accepted approach called "bootstrap testing." Using this method, I have created test statistics to determine whether the observed relationships between CenturyLink significant returns and news are likely to have been generated in a random fashion. If news is not linked to significant returns, then I would not expect there to be a statistically significant relationship that distinguishes those days when there is or is not news from those days when there are or are not significant returns. See Bradley Efron & Robert J. Tibshirani, *An Introduction to the Bootstrap* (CRC Press LLC, 2d ed.) (1993), 1.



of news. I demonstrate this by showing there is no persistent and systematic autocorrelation of CenturyLink abnormal returns.

78. For this analysis, I conducted a statistical test to determine whether the daily abnormal returns of CenturyLink common stock exhibit persistent and systematic autocorrelation using returns and lagged returns.<sup>109</sup> Autocorrelation is a statistical property of the series of returns of a security wherein tomorrow's security price movement can be systematically predicted with a reasonable degree of statistical certainty based solely on the security price movement today (or during some period in the past). Some have argued that persistent and systematic statistically significant autocorrelation in the returns might indicate a violation of market efficiency in that it suggests that the security price does not react quickly, making available profit opportunities from naïve trading strategies that are sustained over time.

79. My statistical analysis of CenturyLink abnormal stock returns for 1,100 days of the Class Period shows there is no statistically significant autocorrelation. This supports a conclusion of market efficiency. Here, I ran a standard statistical model by regressing each trading day's abnormal return on the abnormal return from the prior trading day. Using this model, as I show in **Exhibit X**, I calculate a coefficient of 0.04, which represents the measurement of the relationship between the abnormal current (*i.e.*, today) and lagged (*i.e.*, yesterday) returns, and which has an associated *t*-statistic of 1.36. A *t*-statistic of 1.96 or above would indicate a statistically significant relationship, at the commonly-utilized 5% threshold for statistical significance, between yesterday's and today's abnormal returns. Because the *t*-statistic I derive is well below that threshold, I conclude that there is no statistically significant autocorrelation of CenturyLink abnormal stock returns during

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<sup>109</sup> "Autocorrelation is usually found in time-series data. Economic time series often display a 'memory' in that variation is not independent from one period to the next." Greene, *supra* note 29. In other words, autocorrelation is the measurement of the relationship between the security return at time *t* and the return of the same security at some fixed time in the past. First-order autocorrelation would be found when there is a statistically significant relationship between the common stock return today and the common stock return yesterday. Another way of looking at this concept is that if an observer can use the return from yesterday to predict with some level of certainty the return today, there exists autocorrelation. See *Lehocky*, 220 F.R.D. at 506-507 n.20 (noting that both parties' experts agreed on the helpfulness of autocorrelation); *PolyMedica*, 453 F. Supp. 2d at 276-78.

the Class Period. This finding again supports the conclusion that the market for CenturyLink common stock traded in an efficient market throughout the Class Period.

### **5. *Analysis Examining Corrective Disclosure Dates***

80. I have been asked by Counsel to analyze whether CenturyLink's stock price reacted to the alleged corrective disclosures in a way that is consistent with the results of my test of news versus no-news days and as would be expected of a stock that trades in an efficient market. In **Appendix C** and **Appendix E**, I present empirical information related to the calculation of all the abnormal returns throughout the Class Period, including the three days when the Complaint alleges there were alleged corrective disclosures: Friday, June 16, 2017; Monday, June 19, 2017; and July 12, 2017.<sup>110</sup> The alleged stock-price effects from these disclosures occurred on June 16, 2017, June 19, 2017, and July 12, 2017.<sup>111</sup>

#### **a) June 16, 2017**

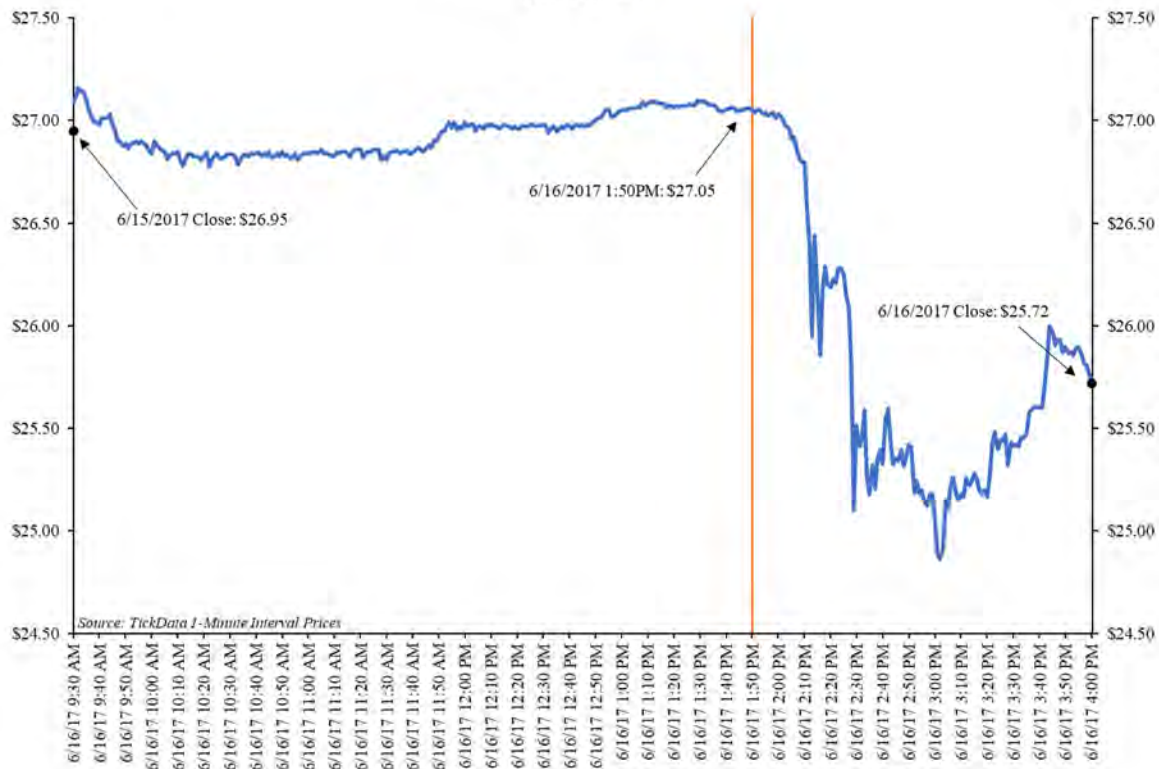
81. The alleged corrective information was disclosed on Friday, June 16, 2017 at 1:50 p.m. (Eastern Time) in a Bloomberg news story.<sup>112</sup> As can be seen in **Appendix C**, after 2:00 p.m., sources from my Factiva search began disseminating and discussing the information. As shown in **Chart 1**, below, on June 16, 2017 CenturyLink's stock price reacted rapidly, and the abnormal return for the day of -4.82% is highly statistically significant (with a p-value below 0.01, which denotes statistical significance with greater than 99% confidence).

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<sup>110</sup> Complaint ¶¶152, 158, 163.

<sup>111</sup> Complaint ¶¶154, 160, 171.

<sup>112</sup> "CenturyLink Is Accused of Running a Wells Fargo-Like Scheme," Bloomberg News, June 16, 2017, 1:50 p.m.

**Chart 1**CenturyLink Intraday Stock Prices  
June 16, 2017**b) June 19, 2017**

82. Over the weekend and throughout June 19, 2017, there were numerous news stories, analyst reports and “reports of consumer class actions alleging systemic billing misconduct,”<sup>113</sup> many of which were related to the alleged corrective disclosure. As shown in **Chart 2**, below, on June 19, 2017, CenturyLink’s stock price declined with an abnormal return for the day of -2.31%. Although the p-value of 6.12% denotes statistical significance above the commonly reported 5% level, it also indicates that the observed price decline is different from zero with a 94% level of confidence.<sup>114</sup> Moreover, the two-day abnormal return over these contiguous alleged corrective disclosure dates is -7.01%, which is highly

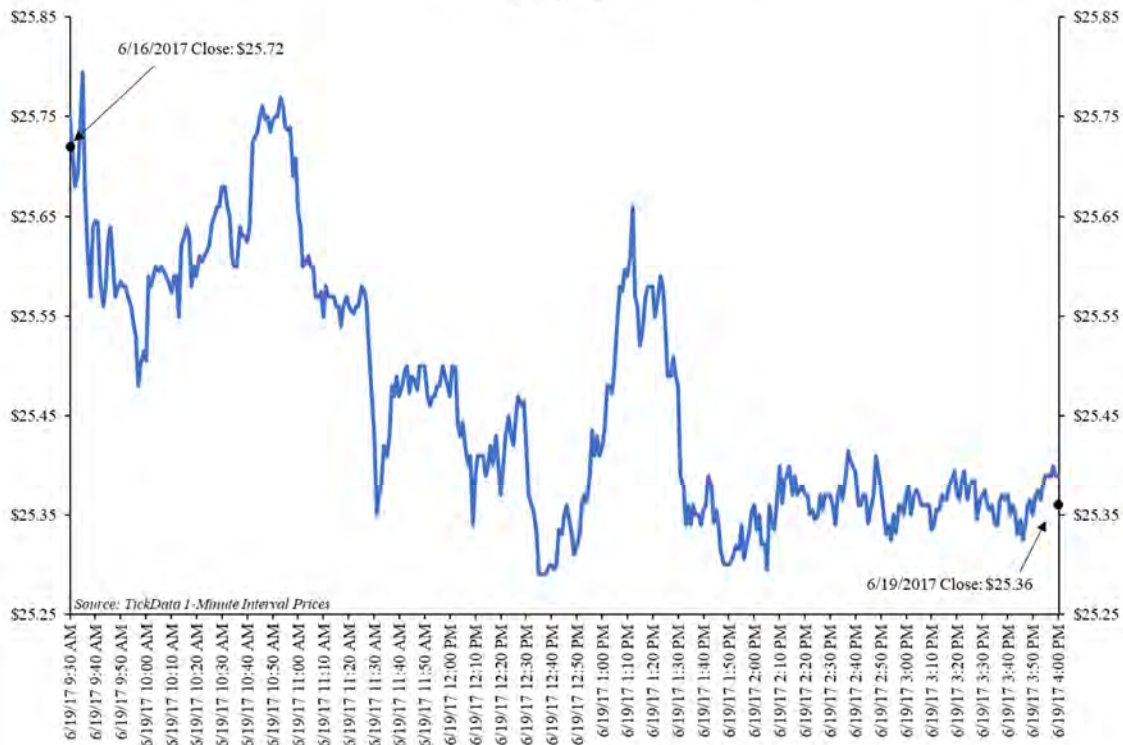
<sup>113</sup> Complaint, ¶266.

<sup>114</sup> Academic researchers often indicate when estimated coefficients are statistically significant at the 10% level because they may consider the empirical results to be economically significant.

statistically significant (with a p-value below 0.01, which denotes statistical significance with greater than 99% confidence).

**Chart 2**

CenturyLink Intraday Stock Prices  
June 19, 2017



**c) July 12, 2017**

83. The alleged corrective information was disclosed on July 12, 2017 at approximately noon (Eastern Time), when the Complaint alleges that “the Minnesota Attorney General announced that it had filed a lawsuit against CenturyLink alleging violations of state consumer protection laws after a year-long investigation.”<sup>115</sup> As shown in **Chart 3**, below, CenturyLink’s stock price reacted rapidly. On that date the stock price declined, with an abnormal return of -4.19%, which is also statistically significant with a p-value below 0.01, denoting statistical significance with greater than 99% confidence.

<sup>115</sup> Complaint, ¶18. “\*Minnesota AG Filed Suite vs CenturyLink on Billing Issues,” Bloomberg News, July 12, 2017, 12:04 p.m.

**Chart 3****d) Summary**

84. Overall, the price reactions for CenturyLink common stock on the corrective disclosure dates are consistent with what an economist would expect when a security trades in an efficient market.

**C. Conclusion Based on the Basket of Factors the Courts Evaluate**

85. My empirical analyses in this section shows that the disclosure of CenturyLink-specific news caused rapid and significant movements in the prices of CenturyLink common stock. These analyses strongly support the conclusion that the market for CenturyLink common stock was efficient, as *Cammer* explains: “[o]ne of the most convincing ways to demonstrate [market] efficiency would be to illustrate, over time, a cause and effect relationship between company disclosures and resulting movements in

stock price.”<sup>116</sup> Moreover, the empirical results for the evaluation of the seven operational factors in Section V also presented strong support for my conclusion that CenturyLink common stock traded in an efficient market throughout the Class Period.

86. Not only have I presented extensive evidence that CenturyLink common stock traded in an efficient market, I note that the empirical analyses herein go well beyond what the Supreme Court has required plaintiffs to demonstrate in *Halliburton II*. There, the Court reaffirmed *Basic*:

The Court in *Basic* acknowledged, however, the debate among economists about the efficiency of capital markets and refused to endorse “any particular theory of how quickly and completely publicly available information is reflected in market price.” The Court instead based the presumption of reliance on the fairly modest premise that “market professionals generally consider most publicly announced material statements about companies, thereby affecting stock market prices.” Moreover, in making the presumption rebuttable, *Basic* recognized that market efficiency is a matter of degree and accordingly made it a matter of proof.<sup>117</sup>

87. In conclusion, when examining the basket of factors that courts generally rely upon for class certification decisions, which are also consistent with the fundamental principles of economics and finance that academics rely upon to evaluate market efficiency, the evidence strongly supports the conclusion that CenturyLink common stock traded in an efficient market throughout the Class Period.

## **VII. INTRODUCTION TO CORPORATE BONDS AND BOND PRICING THEORY**

### **A. Background Information on Corporate Bonds**

88. A corporate bond is a security issued in connection with a corporation’s borrowing activity. The borrower (the corporation) receives a lump sum payment (generally denominated in \$1,000 amounts per single bond) in return for a promise to make

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<sup>116</sup> *Cammer*, 711 F. Supp. at 1291.

<sup>117</sup> *Halliburton Co., et al. v. Erica P. John Fund, Inc.*, 134 S.Ct. 2398 at 2403 (2014) (quoting *Basic*, 485 U.S. at 247, 248, nn. 24 & 28).



periodic payments to the lender in the future. These periodic payments typically include semiannual payments of interest to lenders (called coupon payments), as well as a lump sum payment at maturity (called principal payment).<sup>118</sup>

89. The corporate bond market is primarily an institutional market, meaning that most of the participants are large institutions rather than retail clients. Furthermore, most trading takes place over-the-counter, where the bond trader cannot observe quotes on a centralized or electronic exchange.<sup>119</sup> Instead, for quotes, the institution or customer contacts one or more dealers or alternatively accesses through Bloomberg or other price providers an electronic broadcast of a list of bonds and quotes.

90. The price of a bond is calculated as the present value of the expected future cash flows it generates.<sup>120</sup> In turn, the present-value calculation depends upon the magnitude and timing of promised bond payments and the likelihood of repayment, as well as the market interest rates for comparable securities.

91. The value of a corporate bond<sup>121</sup> is then determined by six components:

- (1) The expected rate of return on similar maturity, riskless debt (*i.e.*, U.S. government bonds);

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<sup>118</sup> Corporate bonds frequently have covenants or terms whereby the bond may be put to the company by the investor or called by the company. They can also be convertible or secured by specified assets.

<sup>119</sup> Corporate bonds also trade on the NYSE, a centralized exchange where there are readily available price quotes. Estimates suggest that only a small proportion of all corporate bond trades are made on the NYSE.

<sup>120</sup> Corporate bonds are generally issued with a par value (which is also sometimes referred to as face value or original principal balance) of \$1,000. Most corporate bonds (like the CenturyLink 7.6% Note) have a par value, face value or original principal balance that is fixed and does not change over the life of the corporate bond. On the other hand, the market value of a bond will change based on the market price of the bond. Bond pricing convention is such that bonds are priced relative to \$100 par value, face value or original principal balance. Therefore, a bond price of \$96 represents a market value of a bond of \$960 or 96% times \$1,000.

<sup>121</sup> The value of a bond with a fixed coupon is expressed as a price relative to \$100 par value. This price relative to par value is inversely related to its yield. This means that, all else constant, as the yield rises, the bond price falls.

- (2) The various provisions and restrictions associated with the particular bond (e.g., call terms, convertibility features, seniority in the event of default, maturity date, etc.);
- (3) The default risk, or the probability that the company will be unable to satisfy some or all of the indenture requirements given current and expected future economic conditions;
- (4) The likely recovery rate of the bonds in case of bankruptcy or liquidation given current and expected future economic conditions;
- (5) The tax considerations of the bond payments; and
- (6) The likelihood of being able to sell the corporate bond in a liquid market.<sup>122</sup>

92. Changes in these variables explain most of the variation in the prices and yields of corporate bonds. However, *daily changes* in corporate bond prices and yields are most often a function of changes in risk-free rates of interest, in risk premia for similar-risk bonds, and in the company's likelihood of default on its obligations.<sup>123</sup>

93. Furthermore, because in the case of a non-convertible bond like the 7.6% Note the bondholder receives only a return of principal, there is generally less upward movement in a bond price than downward movement.<sup>124</sup> In essence, unlike common stock, there can

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<sup>122</sup> The first three components of the value of a corporate bond are discussed in detail in Robert C. Merton, *On the Pricing of Corporate Debt: The Risk Structure of Interest Rates*, 29 J. Fin., 449 (1974). With respect to components (4) and (6) above and general discussions on factors affecting corporate bonds, see Edwin J. Elton, Martin J. Gruber, Deepak Agrawal, and Christopher Mann, *Factors Affecting the Valuation of Corporate Bonds*, 28 J. Banking and Fin., 2747-67 (2004); Merton H. Miller, *Debt and Taxes*, 32 J. Fin., 261-75 (1977); Merton H. Miller and Myron S. Scholes, *Dividends and Taxes*, 6 J. Fin. Econ., 333-64 (1978); Harry DeAngelo and Ronald W. Masulis, *Leverage and Dividend Irrelevancy Under Corporate and Personal Taxation*, 35 J. Fin., 453-64 (1980).

<sup>123</sup> Typically, tax, recovery rate, and liquidity factors are stable on a day-to-day basis, although the expected recovery rates might change with a corrective disclosure. Another variable that can affect the valuation of the bonds, the age of the bond, is deterministic (*i.e.*, known in advance). Thus, while all of these factors affect bond prices, they will have only a small effect day-to-day.

<sup>124</sup> The 7.6% Note is a not a convertible bond.



be an asymmetry of price movements – almost like something bumping up against a ceiling.

94. While U.S. Government obligations are typically viewed as free from default risk, the same is not true for corporate bonds. Corporations can and do default on their promises to make future payments, or otherwise abide by the bond indentures and covenants. Bond default risk, along with the expected loss given default, is often referred to as credit risk. Credit risk is measured by various rating agencies, such as Moody's Investors Service, Standard and Poor's Corporation, and Fitch Investors Service.<sup>125</sup> Once the agency assesses the relative degree of credit risk associated with the type of debt issued by a company, they announce a credit rating grade, which in the case of Standard and Poor's Corporation, spans across 21 categories from AAA to C, or the least risky to the most risky debt.<sup>126</sup> The relative sensitivity of the price of a non-convertible bond to firm-specific information will, all else constant, be greater as the bond moves toward C. On the other hand, the relative sensitivity of the price of a non-convertible bond to economy-wide information will, all else constant, be similar whether the bond is AAA or C. Because, as described in **Appendix J**, there is continuum of ratings from AAA to C bonds, there is also a continuum of responsiveness of bonds to different underlying economic factors and firm-specific information. Finally, it is common for corporate bonds to trade less frequently than stocks because outside influences and internal financial factors have less impact on pricing.<sup>127</sup>

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<sup>125</sup> See **Appendix J** for a description of the bond ratings provided by Moody's Investors Service, Fitch Investors Service, and Standard and Poor's Corporation.

<sup>126</sup> Certain bonds are not rated, and thus, for example have a grade of "NR" from Standard and Poor's Corporation. The rating agencies charge fees to issuing firms to rate corporate bonds, therefore some corporations choose not to have their corporate bond offerings rated. According to data in the 2014 and 2017 Issue Information Corporate Bond Tables from the TRACE Fact Book, in 2013, 2014, 2015, 2016 and 2017, 22%, 25%, 25%, 67%, and 69% of the corporate bond issues (excluding convertible bonds and equity CUSIPs) were not rated. <http://www.finra.org/filing-reporting/trace/trace-fact-book>. A bond that is in default is graded "D" by Standard and Poor's Corporation.

<sup>127</sup> Sriketan Mahanti, Amrut Nashikkar, Marti Subrahmanyam, George Chacko and Gaurav Mallik, *Latent Liquidity: A New Measure of Liquidity, with an Application to Corporate Bonds*, 88 J. Fin. Econ. 272-298 (2008) ("*Latent Liquidity*"); see also Michael L. Hartzmark, Cindy A.

B. Bond and Stock Prices Often Move in Different Directions in an Efficient Market

95. Simon Kwan has explained why a company's stock and bond prices may move in opposite directions in response to new company-specific information:

Depending on the type of firm-specific information disseminated over time, individual stocks and bonds can be either positively or negatively correlated. Information about the mean value of the firm's underlying assets affects the values of the firm's stocks and bonds in similar directions, resulting in a negative [positive] relationship between individual stock returns and changes in individual bond yield [price]. On the other hand, if we view equity as similar to a call option on the firm's underlying assets, then information about the variance of the firm's asset return has opposite effects on the values of the firm's stocks and bonds, resulting in a positive [negative] relationship between individual stock returns and bond yield [price] changes. Hence, examining the correlation between individual stocks and bonds can reveal the dominant type of firm-specific information that drives these investments.<sup>128</sup>

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Schipani and H. Nejat Seyhun, *Fraud on the Market: Analysis of the Efficiency of the Corporate Bond Market*, 3 Colum. Bus. L. Rev. 654, 674-675 (2011).

<sup>128</sup> Simon H. Kwan, *Firm-Specific Information and the Correlation between Individual Stocks and Bonds*, 40 J. Fin. Econ. 63-80, 64 (1996) (citations omitted). In general, then, two factors affect the value of stocks and bonds.

Dr. Kwan asks, "What is the dominant type of firm-specific information that drives individual stocks and bonds?" (*Id.* at 65.) This is an understanding of the domination of one type over the other on average and does not conclude that if one type dominates the other on average that it always dominates. In other words, these factors include the business prospects of the firm and the business risks of the firm. Economists use the mean value (or level) of the firm's assets to describe the business prospects of the firm. If the business prospects improve or the value of the assets increase generally, that means that the value of both the firm's stock and bonds will rise. Economists use the variance of the firm's assets to describe the business risks. If the business risks or the variance of the assets increase this may mean an increase in the value of the firm's common stock (as the upside is enhanced, while the downside of zero dollars has not changed), while this may mean a decrease in the value of the firm's corporate bonds as the likelihood of bankruptcy rises.

Even if changes in the business prospects (or level of the assets) are more often the dominant type of firm-specific information, this does not preclude the changes in a firm's business risks (or the variance of assets) as being an important factor determining the directional relationship between a firm's stock and bond returns. For example, the changes in the business prospects (or the level of assets) might dominate the changes in the business risks (or the variance of assets) in six of ten events, and thus be "dominant," such that one observes the prices of stocks

96. In addition to the widely accepted theory of the relationship between stock and bond returns being a function of the nature of the information, “[t]he wealth redistribution hypothesis, which stems from the conflict of interests between bondholders and stockholders, differs from the information content hypothesis by stating that an increase (decrease) in the equity market value is accompanied by a decrease (increase) in the debt market value. Indeed, wealth can be redistributed from bondholders to stockholders by increasing the risk of the outstanding bonds. Higher bond risk can result from increasing the variance of the firm’s possible future values.”<sup>129</sup> Thus, “the wealth redistribution hypothesis predicts offsetting changes in the values of individual classes of securities and no change in firm value.”<sup>130</sup> This means that stock and bond returns will be inversely related.

97. One of the more common examples of the wealth redistribution effect that is important in examining the 7.6% Note, as well as why stock and bond returns may be inversely related, is that:

An increase in the corporation’s debt, keeping the total value of the corporation constant, will increase the probability of default and will thus reduce the market value of one of the corporation’s bonds. If the company changes its capital structure by issuing more bonds and using the proceeds to retire common stock, it will hurt the existing bond holders, and help the existing stockholders. The bond price will fall, and the stock price will rise. In this sense, changes in the capital structure of a firm may affect the price of its common stock. The price changes will occur when the change in the capital

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and bonds moving in the same direction on six of ten days. However, this does not preclude the business risks (or the variance of assets) from dominating the business prospects (or the level of assets) in the other four events and the prices of stocks and bonds moving in inverse relation on four of ten days.

<sup>129</sup> George Handjinicolaou and Avner Kalay, *Wealth Redistributions or Changes in Firm Value: An Analysis of Returns to Bondholders and Stockholders around Dividend Announcements*, 13 J. Fin. Econ. 35, 38 (1984) (citations omitted) (“*Wealth Redistributions*”).

<sup>130</sup> Ronald W. Masulis, *The Effects of Capital Structure Change on Security Prices*, 8 J. Fin. Econ. 139, 143 (1980).

structure becomes certain, not when the actual change takes place.<sup>131</sup>

98. Therefore, failing to account for the differential and complex interaction of the level and variance of assets – or the business prospects versus the business risks – can lead to misleading results.<sup>132</sup> There does not need to be a corporate transaction or major event for these differential effects to emerge. Every day there are both internal and external factors that affect the business risk and prospects of a firm. Depending on the relative impacts, stock and bond returns might move in tandem or inversely.

### C. Description of CenturyLink’s 7.6% Note

99. On September 21, 2009, CenturyLink “completed a public offering of \$400 million aggregate principal amount of its 7.6% Senior Notes due September 15, 2039.”<sup>133</sup> The amount outstanding of the 7.6% Senior Notes was doubled to \$800 million on June 9, 2011, when the Notes were “reopened.”<sup>134</sup> The 7.6% Note is redeemable.<sup>135</sup> In May 2019,

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<sup>131</sup> Fischer Black and Myron Scholes, *The Pricing of Options and Corporate Liabilities*, 81 J. Political Econ. 637, 650 (1973) (citations omitted).

<sup>132</sup> “In some combinations of wealth transfer and signaling effects, the suggested sign or correlation is ambiguous.” William F. Maxwell and Clifford P. Stephens, *The Wealth Effects of Repurchases on Bondholders*, 58 J. Fin. 895, 897 (2003).

<sup>133</sup> See, the attachment to CenturyLink SEC Form 8-K filed September 22, 2009. Fifth Supplemental Indenture, Dated as of September 21, 2009 to Indenture dated as of March 31, 1994 by and between CenturyTel, Inc. and Regions Bank, as Trustee [for the] 7.60% Senior Notes, Series P, due 2039 [and] 6.15% Senior Notes, Series Q, due 2019 (the “5<sup>th</sup> Indenture”).

<sup>134</sup> See, Prospectus Supplement, dated June 9, 2011 (the “ProSupp”) (“CenturyLink, Inc. is offering the Series P Notes, the Series R Notes and the Series S Notes pursuant to this prospectus supplement. The Series P Notes will constitute a further issuance of, and will form a single fungible series with, the 7.60% Senior Notes, Series P, due 2039 that we issued on September 21, 2009 in the aggregate principal amount of \$400 million. The Series P Notes will have the same CUSIP number and will trade interchangeably with the previously issued 7.60% Senior Notes, Series P, due 2039, immediately upon settlement.”).

See also, ProSupp at p. S-8 (“We may ‘reopen’ any series of Notes at any time without the consent of the holders of that series of Notes and issue additional debt securities with the same terms (except the issue price and issue date), which will thereafter constitute a single fungible series with that series of Notes.”).

<sup>135</sup> ProSupp at p. S-7 (“We may redeem any series of the Notes, at any time in whole or from time to time in part, at a redemption price equal to the greater of (i) 100% of the principal amount of the Series P Notes, the Series R Notes or the Series S Notes to be redeemed and (ii) the sum of the present values of the remaining scheduled payments of principal and interest on the Notes

CenturyLink repurchased some of the 7.6% Note in the open market and, as of November 22, 2019 the outstanding amount was \$540.9 million.<sup>136</sup> However, as of July 12, 2017, the outstanding amount was still \$800 million.<sup>137</sup>

100. The 7.6% Note was also listed on foreign exchanges and, according to Bloomberg, had minimal trading on the Frankfurt and Stuttgart exchanges in Germany.<sup>138</sup> Throughout the Class Period, the agencies all continuously monitored all of CenturyLink's debt securities.

101. At the start of the Class Period, the 7.6% Note had ratings of BB, Baa3, and BB+ by S&P, Moody's and Fitch, respectively.<sup>139</sup> Moody's rating was the lowest notch for investment grade (of the fourth tier), S&P was the second notch (of the first tier) of non-investment grade, and Fitch was the first notch (of the first tier) of non-investment grade. Early in the Class Period, on March 14, 2013, Moody's downgraded the 7.6% Note to Ba2, the second notch of the first tier of non-investment grade. On this date, Moody's effectively downgraded its credit rating to similar levels as rated by S&P and Fitch. In other words, Moody's evaluation of the credit risk of the 7.6% Note was then comparable to the level of credit risk previously disclosed by S&P, while Fitch's rating remained one notch higher still than S&P's rating.

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being redeemed, discounted to the redemption date at the then current Treasury Rate applicable to each series of the Notes plus 50 basis points ... together with, in each case, any accrued and unpaid interest to the redemption date.”).

<sup>136</sup> Source: Bloomberg.

<sup>137</sup> Source: Bloomberg.

<sup>138</sup> Source: Bloomberg. *See also*, ProSupp at p. S-8 (“The Notes will be issued in minimum denominations of \$2,000 and any integral multiple of \$1,000. The Notes of each series will be represented by one or more global Notes in fully registered form without interest coupons. The global Notes will be deposited with the trustee as custodian for The Depository Trust Company, which we refer to below as DTC, and registered in the name of a nominee of DTC in New York, New York for the accounts of participants in DTC. Beneficial interests in any of the Notes will be shown on, and transfers will be effected only through, records maintained by DTC or its nominee and any such interest may not be exchanged for certificated securities except in limited circumstances described in this prospectus supplement.”).

<sup>139</sup> For the credit ratings information I used as a source: Bloomberg. For a rating comparison chart, *see*, for example, <https://www.fidelity.com/learning-center/investment-products/fixed-income-bonds/bond-ratings>.

102. On March 15, 2016, Moody's further downgraded the 7.6% Note from Ba2 to Ba3, which is the third notch of the first tier of non-investment grade. In other words, Moody's disclosed that there was a greater level of credit risk for the 7.6% Note than they had previously assessed. Moreover, this increased credit risk was now greater than any of the three major credit rating agencies had previously assessed.

103. Finally, on October 31, 2016, each of the three credit rating agencies reacted to negative information about CenturyLink and placed the 7.6% Note on negative credit ratings watch.<sup>140</sup> In other words, all three credit rating agencies contemporaneously disclosed their evaluation that there was likely a greater level of credit risk for the 7.6% Note than they had previously assessed.

### VIII. ANALYSIS OF OPERATIONAL FACTORS FOR THE 7.6% NOTE

104. Academic and trade research supports the conclusion that the prices of all of CenturyLink's securities would be highly dependent on the flow of information about the performance of CenturyLink, and thus the efficiency of the prices of the 7.6% Note would be enhanced based on the same basket of factors that determine the efficiency of CenturyLink's common stock — *i.e.*, the basket of *Cammer* and *Krogman* factors examined in Sections V and VI, above.<sup>141</sup> Thus, whether the individuals are investors in CenturyLink common stock or the 7.6% Note, they generally will have the same access to the same information from the same sources (analysts, media, Company filings, etc.). Therefore, to the extent that the CenturyLink share price reflects all publicly available

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<sup>140</sup> After the end of the Class Period, on November 1, 2017, Fitch subsequently downgraded the 7.6% Note to BB, the second notch of the first tier of non-investment grade. On November 1, 2017, S&P subsequently downgraded the 7.6% Note to B+, the first notch of the second tier of non-investment grade. On October 31, 2017 Moody's subsequently downgraded the 7.6% Note to B2, the second notch of the second tier of non-investment grade.

<sup>141</sup> This is consistent with, for example, *Enron*, 529 F. Supp. 2d at 754 (“The Court finds that Dr. Nye’s evidence applying the *Cammer/Unger/Bell* factors to the stock, is sufficient to trigger the fraud-on-the-market presumption for Plaintiffs’ § 10(b) claims based on the options.”); *Marcus v. J.C. Penney Co., Inc.*, 2016 U.S. Dist. LEXIS 115795, at \*30 (E.D. Tex. 2016) (relying on “[t]he Court in *Enron* [which] found that an experts’ application of the *Cammer* factors to common stock was sufficient to trigger the presumption for options as well”), *report and recommendation adopted*, 2017 U.S. Dist. LEXIS 33257 (E.D. Tex. 2017).



information about CenturyLink, and the share price rapidly adjusts to account for new, material and unanticipated information, it would be expected that prices for the 7.6% Note would also reflect all publicly available information about CenturyLink, and the 7.6% Note prices would rapidly adjust to account for new, material and unanticipated information. Therefore, to the extent that the *Cammer* Factors, such as analyst and media coverage, the ability to file SEC Form S-3, and the fact that the common stock trades on a standardized exchange, support the conclusion that CenturyLink common stock trades in an efficient market — which they do as discussed above — these factors also support the conclusion that CenturyLink’s 7.6% Note also trade in an efficient market. Even so, below I examine the *Cammer* and *Krogman* factors and to the extent they are relevant apply them to the 7.6% Note.

A. The Operational Factors Describing Market Efficiency

**1. *Cammer Factor I – Average Weekly Trading Volume***

105. The trading volume data I utilize for the turnover analysis of the 7.6% Note come from FINRA’s TRACE data.<sup>142</sup> FINRA produced the data in response to a subpoena issued by Plaintiffs’ Counsel.<sup>143</sup> The trading records in these data include, among other information, the date and time of the transaction, the transaction price, the quantity of Notes traded and whether the reporting dealer is a buyer or a seller.

106. From the TRACE data, I aggregated the intra-day transactions to calculate total daily volume of purchases and sales. For the purposes of calculating average weekly turnover, there are specific data treatments that I undertook to account for certain indicators in the records, as well as certain adjustments I made to ensure only bona fide publicly

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<sup>142</sup> The Trade Reporting and Compliance Engine (TRACE) is a FINRA-developed vehicle that facilitates the mandatory reporting of over-the-counter (OTC) secondary market transactions in eligible fixed income securities. The system captures and disseminates consolidated information on secondary market transactions in publicly traded TRACE-eligible securities, including investment-grade, high-yield and convertible corporate debt. This information represents all OTC activity in these bonds. [www.finra.org/industry/trace](http://www.finra.org/industry/trace) and [www.finra.org/industry/trace/corporate-bond-data](http://www.finra.org/industry/trace/corporate-bond-data).

<sup>143</sup> Transaction data provided for the 7.6% Note spanned the period from July 1, 2012 through September 27, 2019.

disseminated transactions were used in the analysis, including removal of cancelled or reversed trades and trades not reported to the public. These data treatments and certain other adjustments that were made to the raw data for various empirical analyses are described in **Appendix I**.

107. As shown in **Exhibit XI**, the 7.6% Note had an average weekly turnover level of 2.5%, with a median of 1.8%.<sup>144</sup> This relatively high level of turnover, especially for corporate bonds, is above the 2% level found to support a “substantial presumption” that the 7.6% Note trade in an open, well-developed and efficient market.<sup>145</sup>

**a) Transaction Size and Frequency**

108. In a paper I co-authored, my co-authors and I pointed out that, in general, corporate bonds trade less frequently than stocks because of their different characteristics:

Corporate bonds will likely trade less frequently than stocks because outside macro-economic and internal financial factors generally both have smaller effects on bond pricing than on stock pricing. Unlike common stocks, corporate bonds have predictable cash flows, predictable terminal values, fixed upside opportunities—namely, redemption at par value or \$100 in our example—and a priority on the corporation’s assets. ...On the other hand, corporate equity does not have predictable cash flows, predictable terminal values, fixed upside opportunities, or priority on the corporate assets.<sup>146</sup>

109. Therefore, given the risk-return trade-offs of corporate bonds and the structure of the corporate bond market, it is common for corporate bonds to trade far less

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<sup>144</sup> Aggregate weekly turnover is based on a weekly turnover series. For each week, turnover is computed as total dollar value traded during a week divided by the total par value outstanding at the end of the week. Excluding the first and last weeks of the Class Period, the average weekly turnover is 2.4% and the median remains 1.8%.

<sup>145</sup> “[A]verage weekly trading of two percent or more of the outstanding shares would justify a strong presumption that the market for the security is an efficient one; one percent would justify a substantial presumption.” *Cammer*, 711 F. Supp. at 1286. *See also PolyMedica*, 453 F. Supp. 2d at 266 (quoting *Krogman*, 202 F.R.D. at 474) (“weekly trading volume has been called possibly ‘one of the most important’ of the *Cammer* factors”).

<sup>146</sup> Michael L. Hartzmark, Cindy A. Schipani, H. Nejat Seyhun, *Fraud on the Market: Analysis of the Efficiency of the Corporate Bond Market*, 3 Colum. Bus. L. Rev. 654, 676-677 (2011) (citations omitted).



frequently than every minute of every day.<sup>147</sup> I have examined the transactions volume data from the transactions database to determine the activity of the 7.6% Note relative to a sample of other bonds and notes. In **Exhibits XII** and **XIII**, I present summary statistics describing the number of days between trades and frequency of trading of the 7.6% Note relative to other comparable bonds. The set of data on the comparable corporate bonds come from an academic publication by Sriketan Mahanti, *et al.*, which used the State Street Corporation custody-trades database.<sup>148</sup>

110. I found that during the Class Period, the 7.6% Note traded on all possible trading days, though not always within stock market trading hours. (see **Exhibit XII**). The frequency of trading for the 7.6% Note is high when compared to the trading activity of most other corporate bond issues, as presented in the Mahanti *et al.* paper, *Latent Liquidity*.<sup>149</sup> **Exhibit XIII** shows the percentile distribution of trades by time elapsed between successive trading days for a sample of nearly 20,000 corporate bonds for the time period 2003 through 2005, which shows that for the top decile of the most active corporate bonds there was on average one day between each subsequent date with trading activity. For the 7.6% Note, the average lapsed time is zero days (see **Exhibit XIII**). These results, when comparing the trading activity of the 7.6% Note to the findings in the Mahanti *et al.* paper, *Latent Liquidity*, are consistent with the relatively high average weekly turnover shown in **Exhibit XI**.

111. Yet another way to examine the liquidity of the market for the 7.6% Note is by documenting the characteristics of typical transactions. These summary transaction

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<sup>147</sup> *Latent Liquidity*, at pp. 272-98.

<sup>148</sup> *Id.*

<sup>149</sup> Possible trading days is defined as all days on which the U.S. stock market is open and excluding days that are “Recommended Full Close” by SIFMA (see **Appendix I**).

I note that for *Enron*: “The number of transactions per issue during the Class Period ranged from 24 to 3,684 per issue, an average of 69, a median of 282. # 4390 at 38. The percentage of days on which the trades occurred and the issue was outstanding falls between 1% (11 days) to 36% (132 days), with an average of 12.2% and a median of 9.71%.” *Enron*, 529 F. Supp. 2d at 756.

statistics are shown in **Exhibit XIV**. In the Class Period, the average dollar transaction size in par value for the 7.6% Note was approximately \$97,735 per transaction.

112. The large average size of the individual transactions, along with the analysis of the bid-ask spreads below, suggests that the market for 7.6% Note had sufficient liquidity to absorb large transactions, which is also consistent with the likelihood that large institutions were generally participating in the market. As will be discussed below, this suggests substantial participation of sophisticated institutional traders. The participation of these institutional traders helps in price discovery and the efficiency of the market.

113. Finally, the 7.6% Note had much higher trading volume and frequency than the *Just for Feet* (“JFF”) unregistered bonds, *Enron* bonds, and *DVI* bonds that were all found by their respective courts to have traded in efficient markets.<sup>150</sup>

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<sup>150</sup> The *JFF* court concluded: “The market for these bonds was informationally efficient notwithstanding that on some days the trading volume was low and on others, there was no trading at all.” *AAL High Yield Bond Fund v. Ruttenberg*, 229 F.R.D. 676, 685 (N.D. Ala. 2005). This was partially based on the following facts: “The trading volume of the JFF high yield bonds was *not thin*. They traded on at least 75 of the 140 days between the initial offering and the Chapter 11 bankruptcy filing on November 3, 1999. Excluding the first week of trading, the average daily trading amount of JFF bonds was \$3,245,107....The total face amount purchased by investors over the 140 days was \$138,205,000, and the total sales were \$316,110,000.” *Id.* at 685 n.9.

The *Enron* court noted: “The underwriter data reflect over 15,800 trades for Enron Registered Bonds during the Class Period. The number of transactions per issue during the Class Period ranged from 24 to 3,684 per issue, an average of 69, a median of 282....The percentage of days on which the trades occurred and the issue was outstanding falls between 1% (11 days) to 36% (132 days), with an average of 12.2% and a median of 9.71%.” 529 F. Supp. 2d at 756.

The *DVI* court noted: “Based on verifiable trade volume data, the Senior Notes had an average weekly trading volume during the Class Period of 1.25%.” 249 F.R.D. 196, 214 (E.D. Pa. 2008), *aff’d*, 639 F.3d 623 (3d Cir. 2011). In addition, the *DVI* court observed that “[t]he 1997 Notes were in the top 10% of all corporate bonds in terms of the fewest average days between trades, ranging between 1.92 to 4.63 days during the Class Period....Though such trading volume would not likely support a finding of an efficient market for equities, it is sufficient to support such a finding for corporate bonds.” *Id.* at 215.

I cannot report turnover and frequency of the *HealthSouth* and *Cobalt* Notes, as the reports in those matters were filed under seal.

**b) Transparency**

114. Corporate bond markets do not have the same pre-trade and post-trade dissemination of pricing information that is often found in exchange-traded common stock or even over-the-counter common stock. However, it would be wrong to conclude based on this institutional feature that all corporate bonds trade in inefficient markets. This issue is often referred to as “transparency”:

[T]ransparency means that price and volume information is readily available to potential traders at a relatively low cost. For exchange-traded securities, exchanges collect and disseminate this information at a minimal cost to all interested parties. For over-the-counter traded bonds, price and volume information are not available at zero cost. At any given moment, however, this does not mean that interested investors are not communicating, or do not or cannot generate transparency (price and volume information for recently completed transactions or for future potential trades) ...[A]n efficient market does not require that price and volume information be available at zero cost. Emails or a simple telephone call, or, for that matter, twenty simultaneous emails or telephone calls from the trading floor or web access to the buy/sell offers on the Bloomberg Terminal<sup>151</sup> will supply sufficient transparency.<sup>152</sup>

115. For the 7.6% Note, competition among over 343 dealers and market makers (*see Exhibit XV*) – who, minute-by-minute, day-by-day, risk their own capital and utilize the most advanced information technology and sophisticated research teams – supports transparency and, thus, market efficiency for the 7.6% Note.

116. As shown in **Exhibit XIV**, the average dollar size of the trades during the Class Period for the 7.6% Note was approximately \$98,000. Hence, the cost of making a

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<sup>151</sup> Citation from Hartzmark *et al.*, *infra* note 152: “The Bloomberg Terminal is a computer system provided by Bloomberg L.P. that enables financial professionals to access the Bloomberg Professional service through which users can monitor and analyze real-time financial market data movements and place trades. *See* BLOOMBERG, <http://www.bloomberg.com/professional/> (last visited Dec. 1, 2011).”

<sup>152</sup> Michael L. Hartzmark, Cindy A. Schipani and H. Nejat Seyhun, *Fraud on the Market: Analysis of the Efficiency of the Corporate Bond Market*, 3 Colum. Bus. L. Rev., 654, 692-693 (2011).

few or even twenty telephone calls relative to the dollar volume of these typical trades is minuscule.

117. It is important in a financial market where the security trades less frequently than in the common stock market to realize the distinction between the ability to trade a security and an actual trade in that security. Even when a bond does not trade, that does not mean there are not interested parties sitting on the sideline ready to trade. These interested investors can simply contact bond dealers and learn about dealers' buying and selling (bid and ask) prices and quantities. The fact that there may be no trade on a given day does not mean that interested investors are not communicating or do not or cannot generate transparency. Furthermore, an efficient market does not require that there be trades every day, or every hour, or every minute. Unlike common stocks, corporate bonds have predictable cash flows, predictable terminal values, and fixed upside opportunities.

118. The courts have long recognized that simply because the over-the-counter corporate bond markets lack some of the elements of transparency found in centralized exchanges, that does not mean that the trading markets for corporate bonds are per se inefficient. This was clearly the case in the *Enron* matter, where the court stated that “no-cost efficiency, or for that matter transparency, has not been established as the standard for an informationally efficient, over-the-counter bond market. Obviously ‘transparency’ is relative, involving consideration of numerous factors. No standard of requisite transparency has been established by the courts.”<sup>153</sup> In *HealthSouth*, the court went even further and suggested it was illogical to conclude that the market for corporate bonds was not transparent.<sup>154</sup>

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<sup>153</sup> *Enron*, 529 F. Supp. 2d. at 767.

<sup>154</sup> *HealthSouth Corp. Sec. Litig.*, 261 F.R.D. at 638-39 (quoting *Enron*, 529 F. Supp. 2d. at 768) (“The Defendants then argue that, unlike stock, bonds do not trade on a formal, impersonal, centralized exchange, like the NYSE; that over-the-counter transactions are conducted over the phone or by computer; that an investor has to seek out a dealer to get a quote on a bond and may in fact receive different quotes from different dealers; and that an investor would thus have difficulty determining the prevailing price for a specific corporate bond....In effect, the Defendants argue that the market for *all* bonds is inefficient because it does not function like the stock market. If the court were to accept these challenges, it would be ‘denying application of fraud on the market to the bond market because it does not operate in the same way as a national exchange or trade in the same volume, frequency, or manner as equity on those

119. In fact, in my opinion, courts have rightly determined that the measurable *Cammer* factors are appropriate benchmarks for both over-the-counter common stocks and corporate bonds because no requisite measure of transparency has been established by either judicial precedent or academic research to define when a security trades in an efficient market.

**c) Summary and Conclusion**

120. Thus, the relatively high frequency of trading of the 7.6% Note, the high average weekly turnover and the large size of trading constitute substantial evidence justifying a strong presumption that the 7.6% Note traded in an open, well-developed and efficient market throughout the Class Period.

**2. *Cammer Factor II – Analyst Coverage***

121. In Section V above, I discussed the importance of analyst coverage for disseminating information to traders of common stock, and found that, according to Bloomberg, there were between 15 and 22 analysts who followed and made recommendations on CenturyLink during the Class Period, with an average number of analysts of 19 (*see Exhibit II*). Most analyst reports focused on CenturyLink common stock, but these reports provide information directly useful for evaluating and valuing the 7.6% Note – and, indeed, all publicly-traded CenturyLink debt securities – and especially for evaluating the credit risks of the 7.6% Note. Therefore, even analyst reports focused

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exchanges [and would be like] throwing out oranges because they are not apples. The Court finds that the issue is not whether the market for equity is more efficient than the market for debt securities, but whether the market for debt securities is adequately informationally efficient (whether the price reflect[s] all publicly available information) to trigger the fraud-on-the-market presumption of reliance.’ ...Bond traders at large institutions who make transactions of six figures or more simply do not trade on insufficient information, or information perceived to be unreliable, or on less than all publicly available information. To argue that the investors in HealthSouth bonds did not have sufficient publicly available information in making their decisions about buying and/or selling HealthSouth bonds, and what would be a reasonable price for those bonds, defies logic and ignores the realities of the bond market in which billions of dollars trade hands.”) (emphasis in original). *See also HealthSouth*, 261 F.R.D. at 639 (“Transparency has not to date been recognized as a requirement for an efficient market. In any event, transparency is relative and relative matters should be compared like to like. In terms of the bond market the court, therefore, concludes that the HealthSouth bond market traded on all the publicly available information and thus meets the test for informational efficiency.”); *In re DVI*, 249 F.R.D. at 214.

exclusively on common stock provide useful financial information to debt investors.<sup>155</sup> An important concern to debt investors is the overall financial health of the firm, which determines the ability of the firm to pay the promised series of coupons and the principal amount. Equity reports provide information on many other financial factors, in addition to the outlook for stock prices and earnings. Thus, equity reports provide vital information on the overall health of the firm.<sup>156</sup> While, as noted above, positive equity reports do not necessarily imply higher prices for the 7.6% Note trading around par, negative equity reports could imply lower Note prices. In particular, a substantial decline in stock prices could serve as an early warning sign for the bondholders. To this extent, equity reports provide important and useful information for CenturyLink debt investors.

122. Moreover, during the Class Period, Fitch, S&P, and Moody's monitored all of CenturyLink's debt securities and provided credit rating updates.

123. For comparison purposes, in the *DVI* case, only 3 analysts provided continuous coverage.<sup>157</sup> This compares favorably here, as on average 19 analysts covered CenturyLink during the Class Period (*see Exhibit II*).

124. The continuous coverage of CenturyLink by credit rating agencies, analysts, investment professionals, public press, and financial institutions, along with regular and frequent disclosures by the Company in the form of press releases, teleconference earnings calls and SEC filings and regulatory authorities, supports my conclusion that the 7.6% Note traded in an open, well-developed, and efficient market throughout the Class Period.

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<sup>155</sup> The idea that only analyst reports that analyze the individual securities that are being evaluated are relevant was dismissed in a court ruling where there were no analyst reports on the specific bonds, only general reports on the industry. *See In re Dynex Capital, Inc. Sec. Litig.*, U.S. Dist. LEXIS 22484, at \*13-14 (S.D.N.Y. 2011).

<sup>156</sup> *See DVI*, 249 F.R.D. at 215 ("Though equity analyst coverage is not a perfect substitute for debt analyst coverage, the equity reports nevertheless provided substantial information to the Senior Notes investors. Such information, particularly forecasts of DVI's financial prospects and condition, would likewise have allowed bond investors to better understand DVI's risk profile and its potential for default."), *aff'd*, 639 F.3d 623 (3d Cir. 2011); *see also HealthSouth*, 261 F.R.D. at 635 ("The coverage by analysts of HealthSouth's equities also provided information of interest to the bond market when concerned with the overall financial health of the issuing firm.").

<sup>157</sup> *DVI*, 249 F.R.D. at 209.

Moreover, as discussed above, S&P, Moody's and Fitch all continually monitored CenturyLink's debt securities.

### **3. Cammer Factor III – Market Makers and Arbitrageurs**

#### **a) Market Makers**

125. As discussed above in Section V, the presence of many dealers or market makers is another factor that supports the conclusion that securities trade in efficient markets. These professional traders have significant advantages over small individual investors in terms of the cost of gathering, processing and trading on information.

126. Furthermore, many of the dealers trade for their own accounts.<sup>158</sup> In **Exhibit XV**, I have used the TRACE data to show that there were 343 separately identified reporting market makers for the 7.6% Note throughout the Class Period. This is a substantial number of market makers as compared to other matters where securities were deemed to have traded in an efficient market.<sup>159</sup>

#### **b) Institutional Holdings**

127. The corporate bond market is dominated by large, sophisticated institutions. Indeed, a paper by staff economists at the Board of Governors of the Federal Reserve stated the following:

The market for the U.S. corporate bonds is large and dominated by institutional investors. As of the end of 2010, *institutional investors held about three quarters of the \$7.5 trillion (sic) outstanding corporate bonds issued by U.S. firms.* In addition,

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<sup>158</sup> The Exchange Act defines market makers as follows: “The term ‘market maker’ means any specialist permitted to act as a dealer, any dealer acting in the capacity of block positioner, and any dealer who, with respect to a security, holds himself out (by entering quotations in an inter-dealer communications system or otherwise) as being willing to buy and sell such security for his own account on a regular or continuous basis.” 15 U.S.C. § 78c(a)(38).

<sup>159</sup> For instance, in the *China MediaExpress Holdings, Inc. Shareholder Litigation*, in which an investor class was certified, only an average of 20 market makers were identified. Moreover, the *China MediaExpress* court also cited to three other cases where the securities were deemed to have traded efficiently wherein only 6, 10, and 14 market makers were observed. See, *In re China MediaExpress Holdings, Inc. S'holder Litig.*, 38 F. Supp. 3d 415, 432 (S.D.N.Y. 2014).



institutional trades account for most of the dollar trading volume of corporate bonds.<sup>160</sup>

128. In **Exhibit XVI**, I show that between 50 and 73 individual institutions who were required to report their trading activity who are generally considered to be the sophisticated investors held 21% to 33% of the 7.6% Note as of the end of each year from 2013 to 2016. During the Class Period, over 120 institutions reported holdings of the 7.6% Note.<sup>161</sup> I obtained this data from Bloomberg and, per Bloomberg, the institutional data “may not represent all institutions, if they are not required to publicly disclose their holdings. Especially for fixed income securities, [Bloomberg] may not cover all holders, since public disclosure is not generally required.” Thus, it is likely there are larger institutional (and insurance company) holdings than are reflected in the data I was able to obtain from Bloomberg.

129. In conclusion, the participation of a relatively large number of dealers, standing ready to buy or sell, made an active market in the 7.6% Note, along with the fact that the 7.6% Note were held mostly by institutions, further supports my conclusion that that the 7.6% Note traded in an efficient market throughout the Class Period.

#### **4. *Cammer Factor IV – SEC Form S-3 Eligibility***

130. In Section V above, I discussed the economic logic behind this *Cammer* factor. The fact that CenturyLink was eligible to file on SEC Form S-3, and actually did reference this form during the Class Period by using the S-3 to register multiple types of securities, supports my conclusion that the 7.6% Note traded in an open, well-developed and efficient market during the Class Period.

131. As noted in the prospectus supplement for the 7.6% Note:

This prospectus supplement and the accompanying prospectus are part of a registration statement that we filed with the Securities and Exchange Commission (the “SEC”) using a

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<sup>160</sup> Fang Cai, Song Han, and Dan Li, *Institutional Herding in the Corporate Bond Market*, Board of Governors of the Federal Reserve System, International Finance Discussion Papers, Number 1071, December 2012, p. 3 (emphasis added, citations omitted).

<sup>161</sup> Source: Bloomberg.



“shelf” registration process as a “well-known seasoned issuer.” Under this process, the document we use to offer securities is divided into two parts. The first part is this prospectus supplement, which describes the specific terms of the offering and also updates and supplements information contained in the accompanying prospectus and the documents incorporated by reference into this prospectus supplement and the accompanying prospectus. The second part is the accompanying prospectus, which provides you with a general description of the securities we may offer. If the description of the offering varies between this prospectus supplement and the accompanying prospectus, you should rely on the information in this prospectus supplement.<sup>162</sup>

132. The eligibility and filing of the SEC Form S-3 was undertaken with respect to unsecured senior or subordinated debt securities, preferred stock, common stock, and other security types on March 2, 2015.<sup>163</sup>

#### B. Other Operational Factors to Weigh When Examining Market Efficiency

##### ***1. Krogman Factor I – Market Value***

133. As discussed in Section V above, the *Krogman* court stated that “[m]arket capitalization, calculated as the number of shares multiplied by the prevailing share price, may be an indicator of market efficiency because there is a greater incentive for stock purchasers to invest in more highly capitalized corporations.”<sup>164</sup> In my opinion, all else constant, the same “incentive ... to invest in more highly capitalized corporations” applies with equal force to bondholders. In general, all else constant, the larger the size of the security, the more attention it will receive from brokers, analysts, individuals, institutions (especially if they have investment-size requirements), money managers, hedge funds and other financial entities.

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<sup>162</sup> ProSupp, p. S-1.

<sup>163</sup> SEC Form S-3ASR filed with the SEC on March 2, 2015. A similar filing was made on March 2, 2012 (source: SEC EDGAR database).

<sup>164</sup> *Krogman*, 202 F.R.D. at 478.

134. During the Class Period, the aggregate face value of the 7.6% Note was \$800 million, with the market value ranging from \$587 million to \$844 million.<sup>165</sup> See **Exhibits XIV and XVII**.

135. As discussed above, in *DVI* and *JFF* the courts concluded that the bonds were traded in efficient markets. For comparison purposes, the aggregate levels of notes in *DVI* and *JFF* were only \$155.0 million and \$200.0 million in par value, respectively.<sup>166</sup>

136. The 7.6% Note's relatively large aggregate face value is evidence supporting the conclusion that the 7.6% Note traded in an open, well-developed and efficient market throughout the Class Period.

## **2. Krogman Factor II – The Size of the Float**

137. As discussed above in Section V, float refers to the amount of outstanding securities that are not held by insiders of the corporation.<sup>167</sup> While insiders are subject to trading restrictions and disclosure requirements with respect to their *stock* trades, there are no such restrictions or requirement on insiders with respect to publicly traded, non-convertible debt issues (other than Section 10(b) and Rule 10b-5).

138. Generally, insiders do not hold debt of the Company that they run. There is no evidence in public reports, such as CenturyLink proxy statements or institutional reporting data, that insiders in CenturyLink held any positions in the 7.6% Note. This

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<sup>165</sup> According to CenturyLink's SEC Form 10-K, p. 94 for the year ended December 31, 2016 and 2015, the Company (excluding subsidiaries) had senior debt securities with face value of \$8,975 million and \$7,975 million, respectively. This magnitude suggests there is greater incentive for purchasers to invest in gathering information about CenturyLink senior debt securities than is reflected in the face value of the 7.6% Note alone. See *Krogman*, 202 F.R.D. at 478.

<sup>166</sup> "[DVI] issued two tranches of 9 7/8% senior notes: the first, issued in 1997, totaled \$100 million; the second, issued in 1998, totaled \$55 million." *DVI*, 639 F. 3d at 627.

"On April 14, 1999, the Company completed the private placement of \$200.0 million, 11.0% senior subordinated notes...." *Just for Feet*, SEC Form 10-K for the period ended January 30, 1999, p. 39.

<sup>167</sup> Insiders cannot freely trade in the stock of their firm based on their privileged, nonpublic information. They are subject to both trading restrictions (blackout periods, and restrictions under Exchange Act Sections 10(b), 16(b) and 16(c)) and reporting requirements of Section 16(a).

supports my conclusion that the 7.6% Note traded in an efficient market throughout the Class Period

### **3. *Krogman Factor II – Bid-Ask Spread***

139. As discussed above in Section V, the size of the bid-ask spread in the market is an indication of the liquidity in the market and is sometimes considered a factor in determining whether the security trades in an efficient market. In *Krogman*, the court suggested, “A large bid-ask spread is indicative of an inefficient market, because it suggests that the stock is too expensive to trade.”<sup>168</sup>

140. In corporate bond markets, there are no reported bid-ask spreads. I employ a technique used by researchers in finance whereby I examine all *customer* trades with reporting dealers using the TRACE database.<sup>169</sup> As described in **Appendix I**, for each customer purchase, I calculate the spread based on all customer sales within a +/-15-minute window. I also calculate the spread for each customer sale based on all customer purchases within a +/-15-minute window. Since these transactions are a) confined to a reasonably narrow timeframe; and b) for transactions only with customers (as opposed to other dealers), this approach computes a conservative estimate of the bid-ask spread. *See Appendix I* for details.

141. The results in **Exhibit XVIII** show that for trades between dealers and their non-dealer customers (*i.e.*, eliminating all dealer-to-dealer trades), the average bid-ask spreads as a percentage of the spread mid-point was 2.48% (based on customer transactions). The median bid-ask spread as a percentage of the spread mid-point range

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<sup>168</sup> *Krogman*, 202 F.R.D. at 478.

<sup>169</sup> *See*, for example, Paul Schultz, *Corporate Bond Trading Costs: A Peek Behind the Curtain*, 56 J. Fin. 677-98 (2001).

was 2.55%.<sup>170</sup> These are not dissimilar to liquid NASDAQ stock spreads which, based on academic research averaged 2.55%.<sup>171</sup>

142. In calculating the bid-ask spreads, above, I have eliminated dealer-to-dealer trades, which are likely completed at substantially lower bid-ask spreads. I also calculated the spreads realized by market makers for purchase and sale transactions made to either customers or other brokers by the same market maker within +/-15 minutes. *See Appendix I* for details.

143. The results in **Exhibit XVIII** show that for potential market-making trades by specific dealers, the average bid-ask spread as a percentage of the spread mid-point range was 1.09%. The median bid-ask spread as a percentage of the spread mid-point was 0.93%. These too are comparable to liquid NASDAQ stock spreads which, based on academic research averaged 2.55%.<sup>172</sup> Further, larger transactions generally have substantially lower spreads than the average and I have not broken down the bid-ask spreads by transaction size.

144. The reasonably narrow bid-ask spread, suggesting that the 7.6% Note traded in a liquid market, supports my conclusion that the 7.6% Note traded in an efficient market throughout the Class Period.

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<sup>170</sup> See, for example, Table 6, panel C in Michael A. Goldstein, Edith S. Hotchkiss and Erik R. Sirri, *Transparency and Liquidity: A Controlled Experiment on Corporate Bonds*, 20 Rev. of Finl. Studies, 235-273 (2007).

<sup>171</sup> Kee H. Chung and Hao Zhang, *A Simple Approximation of Intraday Spreads Using Daily Data*, 17 J. Fin. Markets, 94, Table 2 (2014). The paper compared data using closing prices from CRSP (Center for Research in Security Prices) to intraday data and showed the spreads are very close. The average bid-ask spread for Nasdaq common stocks was 2.55% in 2009, the most recent year examined by the authors.

<sup>172</sup> Kee H. Chung and Hao Zhang, *A Simple Approximation of Intraday Spreads Using Daily Data*, 17 J. Fin. Markets, 94, Table 2 (2014). The paper compared data using closing prices from CRSP (Center for Research in Security Prices) to intraday data and showed the spreads are very close.

#### **4. *Summary of the Application of the Operational Factors to the 7.6% Note***

145. Not only do those factors evaluated specifically for the 7.6% Note above support the conclusion that the 7.6% Note trades in an efficient market, but it must be noted that several *Cammer/Krogman* factors discussed above for CenturyLink common stock apply uniformly or substantially similarly to the 7.6% Note, and thus support a finding of market efficiency for both of CenturyLink's securities at issue in this matter. First, the benefits of the dissemination and processing of information about CenturyLink from extensive analyst and credit rating coverage (*Cammer-2*) extends to both CenturyLink's securities and supports market efficiency. Second, the importance of the eligibility of CenturyLink to file an SEC Form S-3 (*Cammer-4*) likewise extends to both CenturyLink's securities and supports market efficiency. Third, the large market capitalization of CenturyLink's common stock, its debt securities and its 7.6% Note (*Krogman-1*) extends to both CenturyLink's securities and supports the conclusion that the 7.6% Note traded in an efficient market.<sup>173</sup> Finally, there is no evidence that any insiders held the 7.6% Note (*Krogman-2*, the size of the float), which would also support the conclusion that the 7.6% Note traded in an efficient market. Thus, each of these features apply to both of CenturyLink's securities and are consistent with and support a conclusion of market efficiency for both securities.

### **IX. THE PRICE-RELATED FACTORS DESCRIBING MARKET EFFICIENCY FOR THE 7.6% NOTE**

#### **A. Event Study for the 7.6% Note**

146. As discussed above in Section VI, to perform an event study, one begins by separating the impact on security price movements of market- and industry-wide factors from the impact of firm-specific factors. For bonds, an event study uses the same approach, but a slightly different specification of the regression model. As with a single-issuer

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<sup>173</sup> For bonds, courts have found that market capitalization for stocks is analogous to the total market value of the bonds calculated as the principal amount outstanding (the total face value) multiplied by the current price of the security.

common stock, this approach uses a so-called market model to partition a single company's bond price movement on each trading day into various components. For common stock, there are three parts: the movement caused by market-wide factors, or the "market effect"; the movement caused by industry-wide factors, or the "industry effect"; and the movement caused by the "firm-specific effect." For bonds, these three components are relevant along with two other elements discussed above in Section VII, namely the credit-risk effect and the time-to-maturity effect.

147. Furthermore, as discussed above, bond-pricing theory tells us that changes in prices will take place based on changes in discounted cash flows of the company. Thus, in addition to those factors that impact the common stock price there are these two other factors, or:

- (1) The expected rate of return on similar maturity, riskless debt (*i.e.*, U.S. government bonds); and
- (2) The default risk or the probability that the company will be unable to satisfy some or all of the indenture requirements given current and expected future economic conditions.

148. Therefore, to run the market model I add explanatory variables to the market model specification used for CenturyLink's common stock that account for these two other exogenous factors. Thus, the regression specification is as follows:

$$N_t = a + \beta_1(R_{mt}) + \beta_2(INDUSTRY_t) + \beta_3(CREDIT_t) + \beta_4(MATURITY_t) + e_t.$$

149. In this equation,  $N_t$  is the daily return to the Note. As with my analysis of CenturyLink's common stock I use  $R_{mt}$  as a proxy for the daily market return, and  $INDUSTRY_t$  as a proxy for the daily industry return. I then add  $CREDIT_t$ , which is the daily return of an index of comparably risky bonds, and  $MATURITY_t$ , which is the daily return of a treasury security with the same time-to-maturity as each of the 7.6% Note. In each of the CenturyLink Note regressions, the explanatory variables are:

$R_{mt}$ : the S&P500 Total Return Index return (Bloomberg ticker "SPTR");

INDUSTRY<sub>t</sub>: the S&P Composite 1500 Telecommunication Services Total Return Index (Bloomberg ticker “SPTRSC50”);

CREDIT<sub>t</sub>: the ICE BofAML 15+ Year BB Cash Pay High Yield Index (Bloomberg ticker “J8A1”); and

MATURITY<sub>t</sub>: the return of a Treasury Note with due date closest to the maturity date of the 7.6% Note (Bloomberg ticker “912810QC5”).

150. The return for INDUSTRY<sub>t</sub> is net of the S&P500 Total Return and the return for CREDIT<sub>t</sub> is net of the Treasury Note returns.

151. Econometric regression methods are used to estimate the parameters or coefficients in the equation above, namely  $\alpha$ ,  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$  and  $\beta_4$ . For the 7.6% Note, the first 120 days of the 120-day regression period are estimated using data that pre-dates the beginning of the Class Period, while I begin the subsequent 120-day rolling regressions from that point onward. To estimate the parameters of the market model for the 7.6% Note on each of the days, I also include “dummy” variables to account for possible anomalous Note price reactions on the impact dates of corrective disclosure dates alleged in the Complaint and days on which the Company announced earnings.<sup>174</sup>

152. For the regressions I calculate  $N_t$  or the daily return to the 7.6% Note using volume-weighted average prices (“VWAPs”) as explained in **Appendix I**. The VWAPs of the 7.6% Note are based on transactions between 9:30 a.m. and 4:00 p.m. The 7.6% Note has VWAPs on 99.9% of the days during the Class Period. For those dates without VWAPs, I calculate multi-day returns for both the 7.6% Note and the related explanatory variables.<sup>175</sup>

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<sup>174</sup> The impact dates for the 21 earnings-related or alleged corrective disclosure dates are: 11/8/2012, 2/14/2013, 5/9/2013, 8/8/2013, 11/7/2013, 2/13/2014, 5/8/2014, 8/7/2014, 11/6/2014, 2/12/2015, 5/6/2015, 8/6/2015, 11/5/2015, 2/11/2016, 5/5/2016, 8/4/2016, 10/31/2016, 2/9/2017, 5/4/2017, 6/16/2017, and 6/19/2017.

<sup>175</sup> By multi-day returns, I mean if the note has no VWAP on a day, then a two-day return is computed, as are the comparable variables used in the analysis.

B. Cammer Factor V – Price Reaction to Unexpected New Information

**1. *Cause and Effect Analysis Examining Days with Disclosures about CenturyLink’s Credit Rating***

153. During the Class Period there were three dates when there were disclosures about changes in CenturyLink’s credit ratings that possibly included material, unanticipated information. First, early in the Class Period, on March 14, 2013, Moody’s downgraded the 7.6% Note to Ba2.<sup>176</sup> Although Moody’s lowered its rating from investment grade to non-investment grade, it was basically catching up to S&P and Fitch (the other two rating agencies), which had already rated CenturyLink as non-investment grade as of the start of the Class Period. Second, on March 15, 2016, Moody’s downgraded the 7.6% Note to Ba3 (while neither of the other rating agencies changed their ratings).<sup>177</sup> Finally, on October 31, 2016, S&P, Fitch and Moody’s all put the 7.6% Note on negative credit watch.<sup>178</sup>

**a) Multi-Day Returns**

154. Before I examine the price reactions to credit rating changes it is important to remember that, as discussed above, corporate bonds do not generally trade as frequently as common stocks. Therefore, it can often take longer for the bond price to respond to new information. Second, by construction the volume-weighted average prices (VWAP) use information from all transactions between 9:30 a.m. and 4:00 p.m. Therefore, when disclosures are made in the middle of the trading day, VWAP combines transactions from both before and after the disclosure. Thus, when examining cause-and-effect, this can affect the empirical results, especially in the case when the post-disclosure transaction volume is lower than the pre-disclosure transactions volume. Third, as discussed below, academics and courts have often found that after a disclosure, dissemination and processing

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<sup>176</sup> Source: Bloomberg. Also see “\*DJ Moody’s Lowers Centurylink’s Senior Unsecured Rating To Ba2; Outlook Stable,” Dow Jones Newswires, March 14, 2013, 11:07 a.m.

<sup>177</sup> Source: Bloomberg. Also see “Moody’s downgrades CenturyLink’s CFR to Ba2; outlook stable,” Moody’s Investors Service Press Release, March 15, 2016 (“Moody’s ... has downgraded CenturyLink, Inc.’s ... senior unsecured debt rating to Ba3 from Ba2.”).

<sup>178</sup> Source: Bloomberg; see *infra* note 189.



of complex information often can take more than a single trading day to be reflected in the security price. In combination these issues justify using multi-day returns in my analyses.

155. As mentioned above, using multi-day returns is common in securities litigation. For example, in a recent Court decision, *Monroe County Employees Retirement System v. Southern Company*, which focused on common stock, the Court made it clear that it is not uncommon for a financial security to take longer than a single trading day to absorb and reflect all publicly available information.<sup>179</sup> The *Monroe* Court laid out the arguments as follows:

First, using exclusively one-day event windows does not change [] conclusion[s] concerning market efficiency. As a result, the debate about event windows in this case is largely academic. Second, there are many cases that find that multi-day event windows are appropriate for event study analysis in securities fraud class actions.<sup>180</sup> Third, and more broadly, the Supreme Court has expressly refused to “adopt any particular theory of how quickly and completely publicly available information is reflected in market price.”<sup>181</sup> Fourth, academic literature supports the use of two-day (or more) event windows.<sup>182</sup> Fifth, the Court finds, in accordance with the

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<sup>179</sup> *Monroe Cty. Employees’ Ret. Sys. v. Southern Co.*, 332 F.R.D. 370, 391 (N.D. Ga. 2019) (“*Monroe*”).

<sup>180</sup> *Monroe*, 332 F.R.D. at 391 (collecting cases); *In re DVI, Inc. Sec. Litig.*, 639 F.3d 623, 635 (3rd Cir. 2011) (“That some information took two days to affect the price does not undermine a finding of efficiency.”), *abrogated on other grounds by Amgen Inc. v. Connecticut Retirement Plans and Trust Funds*, 133 S. Ct. (2013); *In re Xcelera.com Sec. Litig.*, 430 F.3d 503, 513 n.11 (1st Cir. 2005) (rejecting argument that two-day window is inconsistent with efficient market); *Carpenters Pension Tr. Fund of St. Louis v. Barclays PLC*, 310 F.R.D. 69, 96 (S.D.N.Y. 2015) (“A two-to three-day window is common in event studies.”); *In re Vivendi Universal, S.A., Sec. Litig.*, 634 F. Supp. 2d 352, 372 (S.D.N.Y. 2009) (using three-day window); *Fogarazzo v. Lehman Bros.*, 263 F.R.D. 90, 104 (S.D.N.Y. 2009) (accepting event study with three-day window and rejecting argument that multi-day window only applied “where the timing of discrete events was [not] ascertainable”).

<sup>181</sup> *Monroe*, 332 F.R.D. at 391 (“Following its decision in *Basic*, the Supreme Court in *Halliburton II* reiterated that it would not enter the fray of academic debates about the speed at which information is impounded into a stock price, and reconfirmed that market efficiency is based on the fairly modest premise that market professionals generally consider most publicly announced material statements about companies, thereby affecting stock market prices.” (internal quotation marks and citations omitted)).

<sup>182</sup> *Monroe*, 332 F.R.D. at 391-392 (“For example, MacKinlay explains that two-day event windows are appropriate when analyzing earnings announcements. Professor Feinstein cited

academic literature, that when the particular facts and circumstances justify investigating multi-day event windows, such analysis is appropriate. Finally, the Court rejects Defendants' suggestion that [multi-day] analysis should be disregarded because [it] did not analyze only one-day windows or only two-day windows. The Court is unaware of any rule, and Defendants cite none, requiring that one must commit at the outset, before analyzing the data, to investigate only one-day or only two-day event windows. [An] event study analysis is an investigation, and the results might compel you to look at a larger window.<sup>183</sup>

156. It is clear from this decision and the approach that many other courts have used that analyses based on multi-day returns is reliable for evaluating whether a security trades in an efficient market. They have realized, like academics and the *Enron* Court, that there is no such thing as a perfectly efficient market, and it might take more than a trading day for news to be disseminated and digested (or processed) by interested parties.

**b) March 14, 2013**

157. On March 14, 2013 at approximately 11:00 a.m. (Eastern Time), Moody's downgraded CenturyLink's senior unsecured debt rating to Ba2 from Baa3.<sup>184</sup> This two notch drop in ratings to non-investment grade (second notch of highest tier) brought Moody's ratings in line with Standard & Poor's rating of BB and one notch below Fitch's non-investment grade rating of BB+.<sup>185</sup> In other words, Moody's evaluation of the credit

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multiple other legal and academic papers endorsing the use of multi-day event windows and explaining that price reactions to news sometimes occur over two or more trading days, including a paper by David I. Tabak, who explains that "[i]n securities fraud cases, many experts have adopted the convention of looking at one-day, two-day, or five-day periods following an announcement." ... Although stock price reactions generally *begin* quickly, this does not necessarily mean that stock price reactions always *end* quickly. Rather, as Professor Feinstein explained, "[i]t is not settled science that an efficient market price reaction is over within a matter of minutes." (emphasis in original)).

<sup>183</sup> *Monroe*, 332 F.R.D. at 393.

<sup>184</sup> "Moody's lowers CenturyLink's senior unsecured rating to Ba2; outlook stable," Moody's Investors Service Press Release, March 14, 2013; "DJ Moody's Lowers Centurylink's Senior Unsecured Rating To Ba2; Outlook Stable," Dow Jones Newswires, March 14, 2013, 11:07 a.m.

<sup>185</sup> Source: Bloomberg.

risk of the 7.6% Note was then comparable to the level of credit risk previously disclosed by S&P, while Fitch's rating remained one notch higher still than S&P's rating.

158. The 7.6% Note price declined 0.41% on March 14, 2013, with an abnormal return of -0.28%. The decline is not statistically significant. Because the VWAP included transactions both before and after the announcement of the reduction in the credit rating I have also evaluated the decline on March 15, 2013, as well as the two-day abnormal return. The 7.6% Note declined slightly on the following trading day of March 15, 2013, dropping -0.16% with an abnormal return of 0.04%. The two-day decline is also not statistically significant. *See Exhibit XIX.*

159. It is likely the price decline was not statistically significant because it was not "unanticipated," because as mentioned above, Moody's was simply bringing its credit rating in line with S&P and Fitch. Therefore, even though the credit rating decline is material information, because this particular event arguably incorporated no new information about the credit risk of CenturyLink, it would not necessarily be expected to cause a statistically significant reaction in an efficient market.

**c) March 15, 2016**

160. At 3:45 p.m. on March 15, 2016, Moody's downgraded CenturyLink's senior unsecured debt rating to Ba3 from Ba2.<sup>186</sup> This single notch drop in ratings brought Moody's ratings one notch below Standard & Poor's rating of BB and two notches below Fitch's non-investment grade rating of BB+.<sup>187</sup> In other words, Moody's disclosed their evaluation that there was a greater level of credit risk for the 7.6% Note than they had previously assessed. Moreover, this increased credit risk was now greater than any of the three major credit rating agencies had previously assessed.

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<sup>186</sup> "Moody's downgrades CenturyLink's CFR to Ba2; outlook stable," Moody's Investors Service Press Release, March 15, 2016, 3:45 p.m. ("Moody's ... has downgraded CenturyLink, Inc.'s ... senior unsecured debt rating to Ba3 from Ba2.").

<sup>187</sup> Source: Bloomberg.

161. The downgrade occurred very close to the market close.<sup>188</sup> Given that there were no transactions utilized in the calculation of VWAP for March 15, 2016 that occurred after 3:45 p.m., the VWAP for this day represents the pre-announcement price. The daily abnormal returns for the 7.6% Note on March 16, and 17, 2016 are -2.42% and -1.81%, respectively. The March 16, 2016 abnormal return of -2.42% is considered insignificant because its p-value is only at the 6% level. However, even though neither of the daily returns on March 16 and 17, 2016 are statistically significant at the 5% significance level, the two-day cumulative abnormal return for March 16-17, 2016 is statistically significant at the 5% level. **See Exhibit XIX.**

162. This two-day abnormal return is consistent with the conclusion that the information about the credit rating decline was new, material, unanticipated information, which resulted in a price decline for the 7.6% Note.

**d) October 31, 2016**

163. On October 31, 2016, all three credit rating agencies put CenturyLink on negative creditwatch in conjunction with CenturyLink's announcement that it would be acquiring Level 3 Communications.<sup>189</sup> In other words, all three credit rating agencies contemporaneously disclosed their evaluation that there was likely a greater level of credit risk for the 7.6% Note than they had previously assessed.

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<sup>188</sup> Based on Bloomberg, the release was at 3:45 p.m. on March 15, 2016.

<sup>189</sup> "Moody's Places Centurylink's Ratings On Review For Downgrade Following Level 3 Acquisition Announcement," Dow Jones Institutional News, October 31, 2016, 12:14 p.m.; "\*S&PGR Affirms CenturyLink 'BB/B' Rtg On Level 2 Buy Plan," Dow Jones Institutional News, October 31, 2016, 2:42 p.m. ("...we are placing our rating on CenturyLink's senior unsecured debt on CreditWatch with negative implications..."); "\*Fitch Places CenturyLink's 'BB+' IDR on Negative Watch on Proposed LVLT Acquisition," Dow Jones Institutional News, October 31, 2016, 2:54 p.m.

CenturyLink also announced earnings the same day.

I note that two trading days earlier, October 27, 2016, both CenturyLink's common stock and the 7.6% Note had large positive returns that were statistically significant at the 1% significance level. There were multiple news reports that CenturyLink and Level 3 were in advanced merger talks.

164. The 7.6% Note price declined on both October 31, 2016 and November 1, 2016, with both abnormal returns being statistically significant at the 1% significance level. Likewise, the cumulative two-day decline is statistically significant at the 1% level. *See Exhibit XIX.*

165. This is consistent with the conclusion that the information about the negative creditwatch was new, material, unanticipated information, and resulted in a price decline for the 7.6% Note.

**e) Summary**

166. Therefore, overall, even with only three credit-related events, the response of the 7.6% Note to the credit-related information is consistent with and support the conclusion that the 7.6% Note traded in an efficient market.<sup>190</sup>

**2. Cause and Effect Analysis Examining the Relationship Between Abnormal Returns and Volume**

167. As discussed above, in general there is much lower volatility of bond prices and often less sensitivity of bond prices to new earnings-related information unless such news affects the company's credit risk. For this reason, I use an academic-based alternative, discussed below, to the "news/no-news" test to examine the relationship over the Class Period between the flow of information and the returns to the 7.6% Note.

168. Based on academic research and tests often employed in securities fraud litigation, I examine the overall relationship between price volatility of the 7.6% Note and common stock volume to empirically evaluate the impact of information flow on the price of the 7.6% Note throughout the Class Period.<sup>191</sup> The key is that stock volume and price

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<sup>190</sup> Any time when there is a relatively short class period and courts have to evaluate whether a stock trades in an efficient market, generally, the courts find the event study analysis to be helpful. *See, for example, Wilson v. LSB Indus.*, 2018 U.S. Dist. LEXIS 138832, at \*36 (S.D.N.Y. 2018) (accepting event study that used three news days); *Todd v. STAAR Surgical Co.*, 2017 U.S. Dist. LEXIS 1919, at \*25-31 (C.D. Cal. 2017) (accepting event study that used three news days); *In re HealthSouth Corp. Sec. Litig.*, 257 F.R.D. 260, 282 n. 22 (N.D. Ala. 2009) (accepting event study that used two dates).

<sup>191</sup> I and others have utilized this empirical test in our reports. I utilized it in my report that was cited recently in *Applied Optoelectronics* in the United States District Court for the Southern District of Texas, in which the class was certified. *See* No. 4:17-cv-02399, ECF No. 125 ("Dr.

movements of the 7.6% Note should have common ties to the flow of new information about CenturyLink. Numerous academic studies support the concept that common stock volume is a good proxy for flow of information — particularly because, as set forth above, the common stock is efficient (so its volume is generally responding to new information).<sup>192</sup>

169. Therefore, for my test I measure the flow of information into the market using the daily volume of CenturyLink common stock. Common stock volume is likely a better proxy for new information flow to use in this test than bond volume, for three reasons. First, as discussed above, there is academic support to use common stock volume as a proxy for the flow of information. Second, the common stock volume should be independent from any possible price pressures in the market for the 7.6% Note and thus common stock volume addresses reverse causality concerns.<sup>193</sup> And third, in my view, the measure of common stock volume over time is a more reliable proxy than the volume of the 7.6% Note, because bonds trade less frequently and less continuously.

170. For these reasons I examine cause-and-effect for the 7.6% Note throughout the Class Period using the empirical relationship between the 7.6% Note price volatility

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Hartzmark’s report provides sufficient information to support a finding of a causal relationship between the release of information and AOI stock price and supports a finding of market efficiency.”).

<sup>192</sup> This is consistent with Karpoff’s conclusion that: “Although one can question the asserted causality, numerous empirical findings support what will be called here a ‘positive volume-absolute price change correlation...’” and “[i]t is an old Wall Street adage that ‘It takes volume to make prices move.’” Jonathan M. Karpoff, *The Relation between Price Changes and Trading Volume: A Survey*, 22 J. of Fin. and Quantitative Analysis, 109-126, 112 (1987) (“Karpoff”).

For example, all else constant, abnormal security returns are expected to generally be significantly more volatile on earnings release dates or other news dates than on other trading days – *i.e.*, the abnormal returns are likely to be larger (in absolute magnitude) than average. Daniella Acker, *Implied Standard Deviations and Post-Earnings Announcement Volatility*, 29 J. of Bus., Fin. and Accounting, 429-456, 452 (2002) finds that, “[t]he tests on volatility changes around [earnings] announcements indicate that announcements that are easy to interpret or announcements of good news are both associated with a volatility peak on the day of the announcement itself.”

<sup>193</sup> In other words, if supply and demand pressures as measured by the volume of the 7.6% Note are causing greater volatility, this might not be due to information.

and the CenturyLink common stock volume. I test the relationship by regressing the daily 7.6% Note absolute abnormal returns on the log of daily trading volume of the common stock over the Class Period. As shown in **Exhibit XX**, the relationship between the two variables is positive and highly statistically significant. This suggests that the price of the 7.6% Note moves in response to the flow of new information, *i.e.*, that there is a cause and effect relationship between the flow of information and 7.6% Note price movements, which supports the conclusion that the 7.6% Note traded in an efficient market throughout the Class Period.

### ***3. Cause and Effect Analysis Examining Autocorrelation***

171. In Section VI.B.4, I discussed the importance in the investigation of market efficiency of evaluating autocorrelation. In this section I examine this property for the abnormal returns of the 7.6% Note. However, to begin, I discuss how the extensive academic research on the microstructure of financial markets applies to this analysis. This research has been motivated by observed ‘anomalies’ in price movements of financial instruments, especially those traded in the most efficient markets, such as the NYSE. Many of these so-called return anomalies are explained by the accepted reality that securities markets are not perfect. Whether securities are traded on the NYSE or the over-the-counter markets, there are inevitable frictions and institutional structures that lead to bid-ask spreads, different timing of trades and various measurement problems.<sup>194</sup> Therefore, high frequency transactions data comes along with certain caveats. To conduct a careful analysis, it is mandatory that various market microstructure effects must be taken into account in empirical analyses. These microstructure issues introduce a variety of statistical problems that make autocorrelation analyses less robust for corporate bonds than common stock, simply due to the construction of the return series.

172. First, because there is less frequent trading of corporate bonds, I had to choose a method to compute a representative price for each day and thereby a return for that day. The approach I explained earlier in this report is based on constructing a time-series of

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<sup>194</sup> For a discussion of how different trading and markets might impact price discovery, *see*, for example, Larry Harris, *Trading and Exchanges: Market Microstructure for Practitioners* (Oxford University Press, 2003).



volume-weighted average prices and is supported by academic research and is the superior method.<sup>195</sup>

173. Second, and most critically for this report for testing for autocorrelation is the issue often referred to in the academic literature as the “bid-ask bounce.” To explain, in the trade and academia the “bid price” represents the price at which a dealer is willing to buy a security, while the “ask price” represents the price at which a dealer is willing to sell a security. Because, all else constant, the bid price is generally lower than the ask price, the *bid-ask spread* represents the compensation the dealer earns by standing ready to provide immediate execution services. This positive spread also offsets the costs the dealer incurs for maintaining a large inventory of bonds and serves to compensate the dealer for the risk of adverse price movements between the time the dealer acquires the bond and subsequently sells it. The bid-ask spread also compensates the dealer for the value of its time, specialized expertise and other opportunity costs.

174. Bid-ask bounce occurs in all high-frequency transaction data as successive trades tend to bounce randomly between buys and sells. Specifically, the bid-ask bounce occurs when bond prices are relatively stable and orders arrive randomly.<sup>196</sup> The *bid-ask*

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<sup>195</sup> For example, *see* Hendrik Bessembinder, Kathleen M. Kahle, William F. Maxwell and Danielle Xu, *Measuring Abnormal Bond Performance*, 22 Rev. Finl Stds. 4219, 4219 (2009) (“Weighting individual trades by size while eliminating noninstitutional trades from the TRACE data also increases the power of the tests to detect abnormal performance, relative to using all trades or the last price of the day.”).

<sup>196</sup> Suppose that the value of a bond is \$100. Also assume that the market is efficient, there is no firm-specific news, interest rates and bond spreads are constant, and there is negligible probability of default. Further assume that the bid-ask spread is one percent or \$1.00. Hence, if a customer buy order arrives, the dealer executes that transaction at its ask price, or \$100.50. If a customer sell order arrives, the dealer executes that transaction at its bid price, or \$99.50.

Assume now that buy and sell orders arrive in a completely random fashion. If a customer buy order is followed by a customer buy order, the price will remain unchanged at \$100.50. If, however, a customer buy order is followed by a customer sell order, then price will appear to fall by \$1.00 (from \$100.50 to \$99.50). Subsequently, if another buy order arrives, price will revert back to \$100.50. Finally, if another sell order arrives, price will remain at \$99.50.

Given completely random arrival of customer buy and sell orders, a positive return will either be followed by zero return (50 percent likelihood) or negative return (50 percent likelihood), which average to be a negative return. Hence, statistically speaking, positive returns will tend to be followed by negative returns on average. Similarly, a negative return will either be followed by zero return (50 percent likelihood) or positive return (50 percent likelihood), which



*bounce can create the illusion of negative serial correlation* in security returns when there is none in reality. Hence, by ignoring the effect of the bid-ask bounce, an empiricist might incorrectly conclude that the bond returns are predictable because of the observed negative first-order serial correlation. However, this is an anomaly created by the trading activity in the market; it is just an illusion. The negative first-order serial correlation is simply an artifact of the bid-ask bounce, and because investors are unable to earn arbitrage profits using the systematic, negative serial correlation of bond returns, the market is still consistent with market efficiency.<sup>197</sup>

175. My statistical analysis of abnormal returns for the 7.6% Note for 1,091 days of the Class Period shows there is negative statistically significant autocorrelation, which could simply represent bid-ask bounce. I derive a coefficient of -0.25 representing the measurement of the relationship between the abnormal current (*i.e.*, today) and lagged (*i.e.*, yesterday) returns and a *t*-statistic of -8.34. A *t*-statistic in absolute value of 1.96 or above would indicate a statistically significant relationship between yesterday's and today's abnormal returns.

176. Although there is statistically significant negative autocorrelation, as measured by the coefficient on the lagged abnormal return, it is not economically meaningful given the average and median bid-ask spreads of 2.48% and 2.55%, respectively, I calculated in Section VIII.B.3, above. For there to be meaningful economic profit opportunities from the measured daily autocorrelation, the predictable potential profit from autocorrelation would need to be greater than normal transaction costs (*e.g.*, the bid-ask spread).<sup>198</sup> The regression coefficient of -0.25 means that the average

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average to be a positive return. Hence, again statistically speaking, negative returns will tend to be followed by positive returns on average. In this simple setting, even if the bond's true value remains at \$100, the observed transaction prices will bounce between \$100.50 and \$99.50 and the time-series of returns to the bond will exhibit statistically significant first-order negative serial correlation of returns.

<sup>197</sup> See R. Roll, *A simple implicit measure of the effective bid-ask spread in an efficient market*, 39 J. Fin., 1127 (1984); and L. Harris, *Estimation of stock price variances and serial covariances from discrete observations*, 25 Jnl. of Fin. and Quant. Analysis, 291 (1990).

<sup>198</sup> To earn profits the trader must both enter and exit the market, so he will have to pay the full bid-ask spread.

predictable component of today's abnormal return based on yesterday's abnormal return would be one-fourth of yesterday's return. Thus, on average, for the predictable portion of today's return based on yesterday's return to exceed the 2.5% bid-ask spread, the daily abnormal return would have to exceed 10% in absolute value (since one fourth of 10% is 2.5%). In CenturyLink's case, during the Class Period, there were no instances of an abnormal return greater than 10% in magnitude, and only one instance of an abnormal return greater than 5% in magnitude. Indeed, the average of the absolute value of the daily abnormal returns is 0.65%, and thus one-fourth of this is approximately 0.16%. Relative to a cost of 2.5%, it is clear there are no profitable naïve trading strategies available from the statistically significant autocorrelation measured in the regression, as any gains from trading would be more than erased by transactions costs.

177. Therefore, while the 7.6% Note abnormal returns exhibit statistically significant negative autocorrelation, that relationship can be explained by the bid-ask bounce, and is thus not economically meaningful because it is too small to form the basis of a profitable naïve trading strategy. Thus, this factor offers support for the conclusion that the 7.6 % Note traded in an efficient market.

#### ***4. Analysis Examining Corrective Disclosure Dates***

178. I have been asked by Counsel to analyze whether the 7.6% Note prices reacted to the alleged corrective disclosures in a way that is consistent with what would be expected of a stock that trades in an efficient market. In **Exhibit XXI**, I present empirical information related to the abnormal returns for those days when the Complaint alleges there were corrective disclosures. The Complaint alleges there were three corrective disclosures: Friday, June 16, 2017; Monday, June 19, 2017; and July 12, 2017.<sup>199</sup> Generally, all three disclosures with potential impacts have the expected statistically significant price responses.

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<sup>199</sup> Complaint ¶¶152, 158, 163.

**a) Friday June 16, 2017**

179. Alleged corrective information was disclosed on Friday, June 16, 2017 at 1:50 p.m. (Eastern Time) in a Bloomberg news story.<sup>200</sup> Given that there was a greater volume of transactions in advance of the disclosure than took place afterwards I conservatively utilize the VWAP for June 16, 2017 as the pre-announcement price. As shown in **Exhibit XXI** the -2.65% abnormal return of the 7.6% Note on June 19, 2017 following this disclosure is highly statistically significant (with a p-value at or below 0.01, which denotes statistical significance with greater than 99% confidence).

**b) Monday June 19, 2017**

180. For the alleged corrective disclosure over the weekend of June 17-18, 2017 and on June 19, 2017, I also utilize the VWAP for June 16, 2017 as the pre-announcement price. As shown in **Exhibit XXI**, the abnormal returns are -2.65% and -2.46%, respectively, on June 19, 2017 and June 20, 2017. Both these abnormal returns are highly statistically significant (with p-values at or below 0.01, which denotes statistical significance with greater than 99% confidence).

**c) Wednesday July 12, 2017**

181. Alleged corrective information was disclosed on July 12, 2017 at approximately noon (Eastern Time), when the Complaint alleges that “the Minnesota Attorney General announced that it had filed a lawsuit against CenturyLink alleging violations of state consumer protection laws after a year-long investigation.”<sup>201</sup> Given that there was a greater volume of transactions in advance of the disclosure than took place afterwards I conservatively utilize the VWAP for July 12, 2017 as the pre-announcement price. As shown in **Exhibit XXI**, the abnormal return following this disclosure on July 13, 2017 of -1.22% is a statistically significant (with a p-value at or below 0.05, which denotes statistical significance with greater than 95% confidence).

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<sup>200</sup> “CenturyLink Is Accused of Running a Wells Fargo-Like Scheme,” Bloomberg News, June 16, 2017, 1:50 p.m.

<sup>201</sup> Complaint, ¶18. “\*Minnesota AG Filed Suite vs CenturyLink on Billing Issues,” Bloomberg News, July 12, 2017, 12:04 p.m.

**d) Summary**

182. Overall, the price reactions for CenturyLink's 7.6% Note on the alleged corrective disclosure dates are consistent with what an economist would expect when a security trades in an efficient market.

**C. Conclusion Based on the Basket of Factors the Courts Evaluate**

183. My empirical analyses in this section shows that the disclosure of CenturyLink-specific news caused reasonably rapid and significant movements in the prices of the 7.6% Note. Moreover, the empirical results for the evaluation of the operational factors I presented also support for my conclusion that the 7.6% Note traded in an efficient market throughout the Class Period. In summary, when examining the basket of factors that Courts generally rely upon for class certification decisions, which are also consistent with the fundamental principles of economics and finance that academics rely upon to evaluate market efficiency, the evidence supports the conclusion that the 7.6% Note traded in an efficient market throughout the Class Period.

**X. ABILITY TO CALCULATE DAMAGES ON A CLASS-WIDE BASIS**

184. As set forth in the Complaint, Plaintiffs allege that Defendants violated Section 10(b) of the Exchange Act. As explained below, damages for this claim can be calculated on a class-wide basis using a common methodology for each of CenturyLink's publicly-traded securities.<sup>202</sup>

**A. Calculating Damages for Violation of § 10(b) of the Exchange Act for Both Common Stock and the 7.6% Note**

***1. Summary***

185. The calculation of class-wide damages for a violation of Section 10(b) of the Exchange Act is subject to a common and broadly accepted methodology, which indeed is routinely applied and has become a virtual standard in federal securities litigation just like this CenturyLink matter. This class-wide damages methodology is generally referred to as

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<sup>202</sup> As previously noted, I have not been asked to calculate or opine on the quantum of damages here.

the “out-of-pocket” (“OOP”) method. Using the OOP method, damages suffered by Class Members are measured based on the investors’ inflation losses.

186. To implement the OOP method, which is based on a relatively straightforward, standard and commonly-used formula, inputs are calculated. In the OOP method, the inputs are the daily levels of artificial inflation in the prices for the CenturyLink securities caused by Defendants’ alleged misrepresentations and/or omissions. Daily levels of artificial inflation are calculated as the difference between the actual prices paid on that day for the CenturyLink securities and the true or “but-for” values of the securities absent the alleged misrepresentations and omissions (*i.e.*, had the truth been disclosed the price would have been the true value). Inflation losses are then calculated based on the inflation on the date the Class Member acquires their securities less the inflation on the date the Class member sells their securities (or if unsold, based on zero inflation following the Class Period).

187. This common methodology and the related inputs are applied on a class-wide basis. In the end, the inputs or the daily levels of artificial inflation (*i.e.*, the artificial inflation ribbon) along with the actual trading activity of Class Members are used to calculate individual damages in a mechanical and formulaic manner.<sup>203</sup>

## **2. *Description of the OOP Method***

188. The common damages methodology I propose is almost universally applied in federal securities litigation. One can think of the OOP method as a straightforward, standard and commonly-used formula — for example, akin to the formula of the slope of a line taught in sixth grade algebra; namely  $Y = a + bX$ . To solve this simple formula for Y, one uses information to estimate a and b, and then simply inputs X into the formula to solve for Y. To calculate the inputs for the OOP method or formula, an expert often begins with the same type of event study I used above in Sections VI and IX to evaluate the price-

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<sup>203</sup> In addition, the 90-day period following the end of the Class Period would also need to be examined. Under the Private Securities Litigation Reform Act of 1995 (“PSLRA”), a plaintiff may not recover more than the difference between the purchase price and the mean trading price of the stock during the 90-day look-back period. *See* 15 U.S.C. § 78u-4(e)(1).

related factors. Using the results of the event study along with the disclosures of firm-specific information, daily abnormal returns or price movements are calculated.

189. The daily levels of artificial inflation—the inputs into the OOP formula—are calculated and represented by what economists generally refer to as the “inflation ribbon.” This ribbon represents an estimate of the daily level of artificial inflation in the prices of the CenturyLink securities caused by the Defendants’ alleged misrepresentations and omissions, which are based on the price reactions to disclosures either related to or revealing the alleged misstatements and omissions.

190. Calculating actual inputs into the OOP method by parsing and scaling the abnormal returns (if it were required) requires an analysis of *loss causation*. But the Supreme Court’s *Halliburton I* Opinion determined that loss causation is a common issue that need not be analyzed at the class certification stage.<sup>204</sup> Thus, for present purposes, one need only realize that the above-described inputs (*i.e.*, the inflation ribbon) will be common to all class members and applied class-wide. Thus, the OOP method does not involve any individualized issues.<sup>205</sup> In other words, no matter which technique might be chosen at the merits stage of this litigation to construct the inflation ribbon, the techniques used to estimate the true price (and thus calculate artificial inflation) will be common to all putative class members and will be applied on a class-wide basis.<sup>206</sup>

191. Moreover, at the merits stage, when an expert identifies the level of artificial inflation in the CenturyLink common stock attributable to the specific misrepresentations and omissions ultimately established by Plaintiffs, this “but-for” price does not depend on (and does not require consideration of) an individual investor’s risk tolerance or expected

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<sup>204</sup> *Erica P. John Fund, Inc. v. Halliburton Co., et al.*, 131 S.Ct. 2179 (2011) (“*Halliburton I*”).

<sup>205</sup> This is also consistent with the recent *Signet* Court’s conclusion that: “[Defendant’s expert’s] contention that Plaintiff’s methodology did not adequately isolate the impact ... is simply a **loss causation argument in disguise**, because it tests the causal relationship between the alleged misstatements and the price decline. Such an argument ‘goes beyond the *Rule 23* inquiry.’” *Signet* at \*20 (emphasis added and in original, citations omitted).

<sup>206</sup> See, for example, Nicholas I. Crew, Kevin L. Gold and Marnie A. Moore, *Federal Securities Acts and Areas of Expert Analysis*, Litigation Services Handbook: The Role of the Financial Expert, Fifth Edition, Wiley (2012), 24.11-24.14.

returns. Rather it is common to all investors because it measures how the misrepresented information affected CenturyLink's common stock price, which is of course the essence of the fraud-on-the-market presumption.

192. The OOP methodology would also be applied to calculate Exchange Act damages for the 7.6% Note.

## **XI. CONCLUSIONS**

193. Based on the foregoing, my conclusions are as follows:

- i. Throughout the Class Period, CenturyLink common stock traded in an efficient market.
- ii. Throughout the Class Period, the 7.6% Note traded in an efficient market.
- iii. The calculations of damages for violations of Section 10(b) of the Exchange Act (and SEC Rule 10b-5) are subject to a common methodology and may be computed on a class-wide basis for both the common stock purchasers and the 7.6% Note purchasers.

I declare under penalty of perjury that the foregoing is true and correct.

***RESPECTFULLY SUBMITTED THIS 21<sup>st</sup> DAY OF JANUARY 2020***



Michael L. Hartzmark, Ph.D.

# Exhibit 8



**UNITED STATES DISTRICT COURT  
DISTRICT OF MINNESOTA**

**IN RE: CENTURYLINK SALES  
PRACTICES AND SECURITIES  
LITIGATION**

**MDL No. 17-2795 (MJD/KMM)**

This Document Relates to :

Civil Action No. 18-296 (MJD/KMM)

**EXPERT REPORT OF BRUCE DEAL  
MARCH 23, 2020**

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## I. INTRODUCTION

1. I have been engaged by counsel for CenturyLink, Inc. (“CenturyLink” or the “Company”), a large, publicly-traded telecommunications company, to provide expert testimony in the matter *In re: CenturyLink Sales Practices and Securities Litigation* (the “Action”).<sup>1</sup> In this Action, Plaintiffs allege that CenturyLink engaged in an illegal sales practice known as “cramming,” which allegedly had a “material financial impact on the reported financial results” and consequently inflated CenturyLink’s share price between March 1, 2013 and July 12, 2017 (the “Class Period”).<sup>2</sup> Plaintiffs allege that drops in CenturyLink’s stock price on June 16, June 19, and July 12, 2017 were the result of corrective disclosures of the disputed sales practices, which were allegedly concealed from shareholders during the Class Period.<sup>3</sup>

2. I have been asked to address certain economic and financial issues in connection with this Action. I address these topics and provide supporting analysis in the body of this Report. However, before addressing these issues, it is useful to provide an overview of the relevant economic framework in this type of litigation.

### A. Legal and Economic Framework

3. This Action is brought under Section 10(b) of the Securities Exchange Act of 1934 and United States Securities and Exchange Commission (“SEC”) Rule 10b-5 promulgated thereunder.<sup>4</sup> Throughout the Report, I will refer to this and similar litigation as “10b-5

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<sup>1</sup> Consolidated Securities Class Action Complaint, *In re: CenturyLink Sales Practices and Securities Litigation*, United State District Court, District of Minnesota, Civil Action No. 18-296 (MJD/KMM), June 25, 2018 (“Complaint”).

<sup>2</sup> Complaint, ¶¶ 1–15.

<sup>3</sup> Complaint, ¶¶ 16–21.

<sup>4</sup> Complaint, ¶ 22.

litigation.” Based on my understanding from counsel of the legal framework, at a very basic level, the premise of 10b-5 litigation is that the defendants intentionally or with severe recklessness temporarily inflated the value of a security through misrepresentations or omissions, before the stock price subsequently dropped to its “true” level when the actual facts were disclosed. Economic harm results from the difference in per-share inflation for purchasers of the security.

4. As a simplified example, a company might inflate the price of its stock in order to appear to potential customers to be more successful and valuable. To achieve this inflation, the company might falsely announce that it just landed a big contract while announcing no other news. That announcement might cause the stock price to increase. At some later point, the “truth” that the company did not actually land the contract would be revealed and the stock price would decline (*i.e.*, a “corrective disclosure”). The period of the artificial inflation in 10b-5 litigation is known as the “class period.”

5. During the period between the false inflation and the corrective disclosure, shareholders who bought the stock and held through the corrective disclosure may have realized a loss caused by the false information, when they buy at a price that includes inflation and later sell or hold until the inflation decreases or is eliminated. The amount of inflation present in the stock price, if any, during the class period is often referred to as the “inflation ribbon.” This is a reference to the idea that there would have been a “true” price for the security during the class period, but at every moment in time there was an additional level of inflation (the “ribbon”) that caused the actual trading price to be higher than the uninflated price. As information available to investors changes over the class period, the amount of inflation can also change; that is, the inflation ribbon can be of varying width during the class period, depending on the nature and

timing of the alleged inflationary and corrective disclosure(s). This is sometimes referred to as “scaling” the amount of inflation, as the amounts may change due to alleged inflationary or corrective disclosures, or changes in the practices of the company over time. In addition, where there are allegations of multiple false or misleading statements, the inflation ribbon may need to be calculated as a series of ribbons, such that if only a subset of the allegations are found to be true, the inflation ribbon(s) must be able to account for various combinations of findings. This is sometimes referred to as “parsing” the inflation.

6. I also understand from counsel, at a very basic level, that with respect to the predominance requirement for class certification: (1) a presumption of reliance based on the “fraud-on-the-market” theory is rebuttable with evidence that the alleged misrepresentations did not artificially inflate the stock price; and (2) Plaintiffs’ damages model must be consistent with its liability case. With respect to a presumption of reliance based on the “fraud on the market” theory, I also understand from counsel that Plaintiffs must establish a connection between the alleged misrepresentations and artificial stock price inflation by showing some combination of “front-end” inflationary statements and “back-end” curative disclosures. With respect to articulating a damages model sufficient to establish predominance, I further understand from counsel that it is Plaintiffs’ burden to show that their model is capable of measuring only those damages arising from Plaintiffs’ theory of liability given the particular facts and circumstance of the specific case at hand. In other words, simply stating that an inflation ribbon will be calculated is not sufficient. In particular, where scaling and parsing are important and where the fact pattern and allegations are complex, it is necessary to provide an articulation of how a common damages model will be developed that will incorporate the complexities of the case.

7. As explained further in the subsections immediately below—and elaborated upon throughout the remainder of my Report—the particulars of Plaintiffs’ liability theory, coupled with the specific economic facts and circumstances evident over the proposed Class Period (including on the dates of supposed inflationary misrepresentations and alleged curative disclosures) lead me to the conclusion that, from an economic perspective, Plaintiffs have demonstrated neither that the alleged misrepresentations artificially inflated the price of CenturyLink’s securities, nor that the alleged corrective disclosures were actual disclosures as opposed to reflections of uncertainty around allegations, nor that they have a model capable of reliably measuring any common inflation, in the event that any of the various allegations are found to be true.

*1. Economic Framework for This Matter*

8. This Action alleges securities fraud by CenturyLink and certain of its current and former officers related to its stock (traded on the NYSE as “CTL”) and a specific debt offering (the “7.60% Notes”).<sup>5</sup> The broad allegations in this Action, which I discuss in more detail in this Report, are as follows:

- **Inflation:** Rather than a specific instance of inflation (as in my earlier hypothetical single announcement of a new contract), Plaintiffs allege in their Complaint that CenturyLink made a litany of misrepresentations on 55 different dates often corresponding to its quarterly earnings announcements, quarterly and annual SEC filings, and presentations at investment conferences over the multiyear Class Period.<sup>6</sup> They claim five specific categories of alleged misrepresentations related to the Company’s (1) “customer first” business strategy, (2) financial performance drivers, (3) reasons for its “fluctuating financial results,” (4) business practices related to sales and billing, and (5) “material omissions under Item 303.”<sup>7</sup> They further allege that the company implemented an experimental “low cramming” period that significantly

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<sup>5</sup> Complaint, ¶ 27.

<sup>6</sup> Complaint, ¶¶ 190–263.

<sup>7</sup> Complaint, ¶ 190.

impacted revenues.<sup>8</sup> Plaintiffs also analogize their *allegations* of cramming-related misconduct to *findings* during the Class Period that a much larger financial institution, Wells Fargo, did in fact engage in fraudulent billing.<sup>9</sup>

- **Corrective Disclosures:** Rather than a specific disclosure by the company of a past error, fraud, or wrongdoing (as in my hypothetical corrective Company announcement of the new contract not really being landed), there are three alleged corrective disclosure dates in this Action. Each of these is an announcement of a new lawsuit or an investigation spurred by allegations of sales and billing practices that had been leveled at the industry for decades prior to the Class Period, as well as during the Class Period. Importantly, they are *not* announcements concerning the accuracy of the alleged misstatements in the Complaint, nor are they announcements of resolution of the lawsuits or investigations with large fines, major regulatory actions, restatement of financial results, or other findings of any truth to Plaintiffs' allegations of systematic fraud of the sort that would expect to materially change the price of CenturyLink stock.

9. Plaintiffs identify allegedly inflationary disclosures on 55 different calendar days, which could potentially have impacted CenturyLink's securities prices on 52 different market days,<sup>10</sup> spread across each quarter over a 4+ year Class Period. On these 52 market days, a large amount of Company-specific information other than the various categories of alleged misstatements was often also disclosed, such as quarterly earnings announcements of financial results. Furthermore, over the entire Class Period, CenturyLink, similarly situated local exchange carriers, and the telecommunications industry as a whole were undergoing massive change due to

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<sup>8</sup> Complaint, ¶¶ 109–120.

<sup>9</sup> See, for example, Complaint, ¶ 16. “The truth concerning the Company’s fraudulent practices began to be revealed on June 16, 2017, when Bloomberg published a story revealing that a CenturyLink whistleblower, Heiser, was fired after raising her concerns about the Company’s fraudulent business practices with Defendant Post. That article, titled ‘CenturyLink Is Accused of Running a Wells Fargo-Like Scheme,’ addressed Heiser’s account of CenturyLink’s practice of charging customers for services they did not request, the striking parallels to the Wells Fargo scandal, ...”

<sup>10</sup> Some of the allegedly inflationary disclosures were made after 4 PM ET, which is the close of trading for CenturyLink’s stock. Therefore, their potential impact on CenturyLink securities prices would be felt on the following trading day. If a separate misstatement was alleged on that following trading day (before 4:00 PM), any potential price impact(s) for the two consecutive-day disclosures would be felt on the same trading day. As such, I find that the allegedly inflationary disclosures could potentially have affected CenturyLink’s stock price on 52 distinct trading or “market” days (hereafter referred to as “alleged inflationary days,” “52 alleged inflationary dates,” or something similar).



increasing demand for sources of supply of bandwidth for audio, video, and data transmission and decreases in demand for certain legacy services, such as fixed telephone lines.

10. As explained in detail later in my Report, my analysis of the 52 allegedly inflationary disclosure dates shows that CenturyLink's stock price had positive abnormal returns on only four of those dates, negative abnormal returns on eight of those dates, and no abnormal returns on the remaining 40 of those dates. Analyst commentary in response to Company disclosures on those dates also gives no systematic indication that professional market observers attributed any particular stock price movement as a response to any of the five categories of alleged inflationary misrepresentations. These economic facts and circumstances make it very difficult, if not impossible, to identify exactly what information was (or wasn't) moving CenturyLink's stock price, let alone by how much, on those 52 days. Plaintiffs have not identified a model that would allow any accurate calculation of inflation from these alleged inflationary disclosures, and have certainly not articulated how a common model would allow for parsing and scaling of alleged inflation such that a common method could be used to calculate damages.

## 2. *Dr. Hartzmark's Report and Opinions*

11. I understand that this Action is currently in the class certification stage of the litigation. As part of that process, Plaintiffs have retained Dr. Michael Hartzmark as an economic expert. His report, dated January 21, 2020<sup>11</sup> covered several topics:

- **CTL Equity Market Efficiency:** Dr. Hartzmark devotes 35 pages of his report to discussion and analysis of the efficiency of the market for CenturyLink's equity.<sup>12</sup>

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<sup>11</sup> Expert Report of Michael L. Hartzmark, Ph.D., January 21, 2020 ("Hartzmark Report").

<sup>12</sup> Hartzmark Report, pp. 6–42.

- **CTL Equity Event Study Related to Three Alleged Corrective Disclosure Dates:** On the final three pages of his discussion of CTL market efficiency, he presents the results of his event studies for each of the three alleged disclosure days, *i.e.*, that there were statistically significant negative abnormal returns on two of those three days.<sup>13</sup>
- **7.60% Notes Bond Market Efficiency:** Dr. Hartzmark devotes 38 pages of his report to discussion and analysis of the efficiency of the market for CenturyLink’s 7.60% Notes.<sup>14</sup>
- **7.60% Notes Event Study Related to Three Alleged Corrective Disclosure Dates:** On the final three pages of his discussion of market efficiency, he presents the results of his event studies on the 7.60% Notes for each of the three alleged disclosure days, *i.e.*, that there were statistically significant abnormal negative returns on two of those three days.<sup>15</sup>
- **Damages Calculations on a Class-Wide Basis:** On the final four pages of his report, Dr. Hartzmark discusses, in very broad terms, a “common” approach to measuring damages for all class members. This proposed method is simply to compare the amount of inflation in the stock (if any) at the date of purchase to the amount of inflation (if any) at the point of sale or the end of the Class Period. In other words, the “common method” is to have someone, at some point, develop one or more inflation ribbons over time, and then use the mathematical technique of simple subtraction.<sup>16</sup>

12. It is also important to understand what Dr. Hartzmark has *not* done.

- **No Measure of Initial Inflation:** Dr. Hartzmark has made no investigation and done no event studies to identify or measure any inflation in the CenturyLink stock price at any point in time. He has not proposed any method to review the 52 alleged inflationary days and has not proposed any method to estimate, separately or jointly, the impact of the five categories of allegedly inflationary misrepresentations. Indeed, in his deposition, he went out of his way to make it clear that he had not been asked to even *try* to identify or measure inflation, price effects, or loss causation.<sup>17</sup> In other words, he has neither done, nor described, any method to measure, parse, or scale inflation around the alleged inflationary disclosures and misrepresentations.
- **No Measure of Actual Loss or Damages Associated with the Alleged Corrective Disclosure Dates:** Dr. Hartzmark has made no investigation of whether the three alleged corrective disclosure dates actually corrected any prior misstatements, nor whether any amount of any stock price drop on any date should be attributed to a

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<sup>13</sup> Hartzmark Report, pp. 38–41.

<sup>14</sup> Hartzmark Report, pp. 42–80.

<sup>15</sup> Hartzmark Report, pp. 78–80.

<sup>16</sup> Hartzmark Report, pp. 80–83.

<sup>17</sup> Videotaped Deposition of Michael L. Hartzmark, February 25, 2020 (“Hartzmark Deposition”), 59:4–59:5; 67:15–68:4; 161:22–162:3; 163:15–163:19.

reduction in inflation from any one category (or even the combined set) of allegations. In other words, he has neither done, nor described, any method to measure, parse, or scale inflation around the alleged corrective disclosures.

- **No Measure of Any Inflation Ribbon(s):** Dr. Hartzmark agreed in his deposition that in order to implement his “common method” (inflation ribbon plus subtraction), it would be necessary to have an inflation ribbon. He also went out of his way in his deposition to note that neither he, nor anyone else he identified, had been asked to calculate an inflation ribbon at this stage.<sup>18</sup> He has neither done, nor described, any method to conduct such a calculation that would accurately measure inflation over time in a manner that would parse and scale the inflation ribbons to account for the combinations of the five categories of alleged misrepresentations, the 52 alleged inflationary dates, the nearly year-long alleged “low cramming” period in the middle of the Class Period, and the three alleged corrective disclosure dates.

13. In summary, it appears to be Dr. Hartzmark’s view that, from an economic perspective, it is not necessary to do any investigation of the economic framework or the specific alleged misconduct at the class certification stage, other than market efficiency tests and, perhaps, event studies focused on one or more alleged disclosure days to see if the overall abnormal returns are statistically significant. With regards to the stock price drops on the alleged corrective disclosure dates, he apparently does not find it necessary at this stage to do *any* analysis as to (1) whether *any* portion of any stock or bond price drop on those alleged corrective disclosure days is causally linked to any one or any combination of the allegations, (2) whether these stock price drops reduced or eliminated inflation, (3) whether any inflation even existed in the first place at any point in time associated with one or more of the categories of alleged misrepresentations, or (4) whether the alleged temporary “low cramming” period in the middle of the proposed Class Period means that liability and damages are zero, less, the same, or even greater during that portion of the Class Period.

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<sup>18</sup> Hartzmark Deposition, 71:3–72:1; 140:4–141:16.

14. Armed with his “common method” of subtraction, he is simply assuming everything in the Complaint is true at this stage,<sup>19</sup> and that someone else will be able to take care of parsing and scaling damages ribbons to account for the combination of 52 alleged inflationary days, five categories of alleged misrepresentations, the alleged “low cramming” period in the middle of the Class Period, and the three alleged corrective disclosure dates to measure inflation in a manner applicable to all Class members without any need for individualized inquiry.

15. As such, Dr. Hartzmark has not put forward a common economic model of damages consistent with Plaintiffs’ liability case, *i.e.*, that there were many allegedly inflationary misrepresentations, or omissions, of a variety of types, made primarily on earnings announcement and other information-rich dates; that the alleged cramming and related sales norms/culture and practices that allegedly formed the basis of these misrepresentations or omissions it halted for a period of time during the Class Period; and that the various types of fraud were revealed on multiple allegedly curative disclosure dates on which only *accusations* and *investigations* (as opposed to proof) of alleged fraud were announced into an environment primed for fear, uncertainty, and doubt (“FUD”) because of a large-scale fraud committed by Wells Fargo, as described further below.

16. Particularly in light of the evidence mentioned above (and discussed further below) regarding no systematic positive inflationary abnormal returns consistent with Plaintiffs’ liability case, having a model capable of identifying and parsing out alleged misstatements from confounding news and parsing among categories of allegations is important. In addition, having a model that can scale inflation to account for various inflationary and corrective price impacts

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<sup>19</sup> Hartzmark Deposition, 150:5–150:16.

would seem essential from an economic perspective. As he noted in his deposition, Dr. Hartzmark agrees that such “parsing and scaling” of the alleged misconduct and its price impact vs. the effects of confounding factors is essential, but he has simply assumed away that modeling challenge in his generic opinions with respect to how to measure such inflation by assuming all of Plaintiffs’ fraud allegations are true at this stage and that someone else will do a loss causation analysis at a later point in time.<sup>20</sup>

17. Put differently, Dr. Hartzmark’s “common method” is effectively divorced from the specific facts of this, *or indeed any*, case. Nowhere in his report or deposition did Dr. Hartzmark clearly articulate the various categories of alleged misstatements and omissions that his “common method of proof” was supposed to be able to “parse and scale” inflation onto. He admitted that doing so would require case-specific inquiry that he has not done.<sup>21</sup> He also ignores

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<sup>20</sup> Hartzmark Deposition. “A ... If it's the case that I at a loss causation analysis were to present an appropriate parsing and scaling approach that the finder of fact determined was not reliable. Okay.” (144:8-12) “You're describing the process one goes through in a loss causation analysis to end up with the inputs for your inflation ribbon; correct? A Yes. Q Parsing out the fraud-related from the nonfraud-related, perhaps scaling it, depending if there have been changes over the course of the class period; correct so far? A Yes.” (145:7-16) “Q ... My question to you is: How do you know it can be done in this case? What work have you done to get comfortable that that parsing and scaling is possible here -- in this case? A. Again, what I've said is that it is -- whatever that input is will be applied classwide. Q You're skipping over the work that's necessary to get to the input.” (146:2-18, objection omitted) “I will say that with respect to the corrective disclosures, they are not earnings announcements, which are often the case and require parsing, because there's multiple information that's disclosed. But with respect to the corrective disclosures in this matter, to the extent that one assumes, as I have, that they are proven to be corrective disclosures and correcting a fraud that has taken place, then there's likely no confounding information and possibly no reason to parse.” (150:5–150:16.)

<sup>21</sup> Hartzmark Deposition. “A: It's my understanding that the plaintiffs have alleged that CenturyLink misrepresented or omitted information related to their pricing and billing policies and strategy. Q: Anything else? A: I would say that sort of generalizes it. Q: What is your understanding of the fact or facts that plaintiffs claim CenturyLink concealed during the class period? A: It's my understanding ... Again, the facts associated with billing and pricing and the so-called, I think – I believe it's called and cited into the case – cramming approach to sales. Q: Without looking at the complaint, can you be any more specific than that, or is that your understanding? A: That's my general understanding, yes. (56:14–57:15; objections and interjections omitted) “Q: Do you have an opinion as to whether the statements under each of those categories [four categories of allegedly false and misleading statements] affected CenturyLink's stock price? ... THE WITNESS: I've not been asked to evaluate loss causation or price impact.” (58:25–59:5; objection omitted); “Q: So, in other words, you cannot conclude scientifically that there has been any abnormal return to the stock price on the date of the challenged statement [where you observe no statistically-significant abnormal return to the stock price] ... A: ... you can't come up with a conclusion associated with the price impact simply from the event study.” (64:25–70:2; objections, clarifying questions, and non-responsive answers omitted) “A: ... As to exactly how you do the loss causation or price impact, I have not done that at this

Plaintiffs’ contention that CenturyLink reduced or halted cramming for a period of time, that this alleged year-long change was a causal factor in adversely impacting revenue, and that if true, such facts could reasonably lead to changes in inflation over time—and even its elimination for a period of time—that his “common method” does not address. Nevertheless, Dr. Hartzmark testified that his “common method” is applicable to any situation. As he noted in his deposition, even if the inflation ribbon were zero throughout the Class Period, the “damages method still applies.”<sup>22</sup> While this is technically an accurate statement, since his “common method” is simply subtraction, it is not an economically useful statement, and provides no assistance to the finder of fact in determining whether a common method of actually calculating inflation can be developed in this particular case with the complex set of alleged inflationary statements, corrective disclosures, and intervening alleged facts.

### 3. *Relevance of the Economic Framework at the Class Certification Stage*

18. It is important to consider Dr. Hartzmark’s opinions in the context of the allegations in this Action, as opposed to some simpler, hypothetical example of alleged securities fraud. An implication of his framework and opinions appears to be that there are no economic or fact-specific issues that are relevant to class certification other than market efficiency, a few abnormal negative stock price changes, and the concept of using an inflation ribbon plus subtraction. I disagree. While a full analysis of loss causation and price impact typically does not occur at the class certification stage, it is too simplistic to not provide *any* economic framing of the core issues or any outline for the mapping of the various allegations to inflation ribbon(s).

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stage as it relates to CenturyLink.” (70:14–24) “A: I know how to do it [loss causation] in a specific case. Each case is different. (71:12–13)

<sup>22</sup> Hartzmark Deposition, 138:8–138:11.

Simply citing the concept of an inflation ribbon, identifying the use of subtraction, assuming a filed complaint will be shown to be true, and noting that someone later will estimate an inflation ribbon regardless of the complexity of the allegations, would effectively endorse the certification of a securities class action in *virtually every case* where a stock price dropped and the drop is framed as a “corrective disclosure.”

19. This need for the proposed common method of proof to be applicable in the economic framework of the specific case at hand is particularly obvious in this Action, given the broad facts and allegations and the complex combination of categories of allegations, inflation, and disclosures, for the following reasons:

20. First, Plaintiffs have alleged five categories of allegedly inflationary misrepresentations ranging from inflated revenue reporting to comments regarding corporate culture. Dr. Hartzmark has given no indication of how these different types of alleged misstatements might have differential price impacts—which they very well could.

21. Second, the supposed inflation could have occurred on 52 market days. On most of these days, however, there was no statistically significant stock price movement. On many of these days there was regular reporting of many and varied quarterly and/or annual financial and operational results and forecasts, of which there have been no restatements. Dr. Hartzmark has done nothing to explain how Plaintiffs would go about “parsing and scaling” the allegedly inflationary misrepresentations (of various types) and their price impacts from the many pieces of confounding news and their price impacts. It is not at all clear that this can even be done.

22. Third, Plaintiffs’ theory of liability alleges that CenturyLink altered—and perhaps even halted—rather than maintained its allegedly inflationary cramming practices for a period in the middle of the Class Period. If this is the case, any inflation ribbon(s) would likely change in

height (price impact)—and quite possibly even be severed—during the Class Period. Dr. Hartzmark has made no mention of this peculiarity in this Action—and how it may very well require individualized (or at least sub-Class) inquiry—in his generic discussion of inflation measurement.

23. Fourth, the supposed corrective disclosures were not *findings* or *admissions* that CenturyLink had, in fact, been employing widespread cramming that was likely to have a major impact on its past or future financial results or business operations. Instead, they were the announcement of *allegations* and new *investigations* of such purported conduct, with an invocation of potential “Wells Fargo-like” concerns.<sup>23</sup> Plaintiffs have neither articulated, even in broad strokes, how to parse the substance/truth of the allegations from the FUD they triggered, especially in an environment of heightened concern about other Wells Fargo-like corporate issues, nor proposing any way to scale a common inflation ribbon measuring the price impact of the truth vs. the FUD. As such, it is very uncertain how or even whether such parsing could be done to reliably identify the common price impact of any true fraud in this particular case.

24. Failing to do any substantive economic analysis (including parsing and scaling) of any of the myriad alleged front-end inflationary misrepresentations and their price impacts independent of confounding factors, failing to consider how Plaintiffs’ allegations of a reduction and possibly even halting of allegedly inflationary behavior might change—or even break—the inflation ribbon over the proposed Class Period, and failing to do any economic analysis as to the accuracy or ultimate substance of the alleged corrective disclosures and how any accuracy/substance of the allegations vs. FUD about them impacted the price of CenturyLink

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<sup>23</sup> “CenturyLink Faces Class-Action Lawsuit Seeking Up to \$12 Billion,” *Bloomberg*, June 19, 2017.



securities on those days provides, at best, an incomplete presentation of the economic framework for the fact finder to use in determining whether a proposed class is appropriate for certification on common issues and whether there is a common method of proof and calculation of damages.

## **B. Assignment**

25. I have been asked to address a number of economic issues in this Report. I focus first on the economic framework discussed above, which is completely absent from the Hartzmark Report. I then provide analysis related to his actual opinions, including analysis and critique of his event study methodology for both CenturyLink's equity and its 7.60% Notes.

## **C. Qualifications**

26. I am an economist and Managing Principal (partner) at Analysis Group, an economic and financial consulting firm with over 1,000 professional staff in offices throughout the United States, as well as offices in China, Canada, and Europe. I lead the economic consulting practice in the Menlo Park, California office of Analysis Group.

27. I have served as an expert witness and consulting expert in a wide variety of litigation matters. I have served as a testifying expert in dozens of matters, covering a range of issues including class certification, liability, and damages. My class action work has covered a variety of industries and practice areas, including finance and securities litigation. I have served as a testifying expert evaluating class certification issues in a number of matters, including in the recent matter *Martin et al. v. Blue Shield of California*, in which Blue Shield successfully challenged class certification involving health insurance premium setting. The decision was upheld by the California Court of Appeals, which cited my work. I served as a testifying expert on damages in *Attorney General of the State of Washington v. Comcast*, a case involving

cramming allegations in which the judge ultimately found that Comcast owed less than 10 percent of the \$100+ million claimed by the Attorney General. I have led Analysis Group teams on a number of securities matters, many involving 10b-5 claims. These include securities class action matters for Ernst & Young, AT&T, Oracle, Williams, and Alibaba. I have also published a number of book chapters and articles, and have presented on topics such as stock option backdating, the subprime mortgage crisis and disclosures, and NASDAQ market maker litigation. A copy of my CV, together with a list of the trial and deposition testimony I have given in the last four years, is attached as **Appendix A**.

28. Analysis Group is compensated at the rate of \$850 per hour for my time. Research and analysis for this Report was also performed by Analysis Group personnel under my direction and guidance. Neither my compensation nor that of Analysis Group is contingent upon my findings, the testimony I may give, or the outcome of this litigation.

#### **D. Facts and Data Considered**

29. In forming my opinions, I have reviewed documents and other materials provided to me by counsel for CenturyLink or obtained from public sources. These materials include, among others, the Hartzmark Report, CenturyLink's SEC filings, analyst reports, news articles, relevant academic research, legal documents, and data and documents produced by Dr. Hartzmark. The sources on which I rely are identified in this report and the accompanying exhibits, or are listed in the attached **Appendix B**.

30. I understand that discovery is ongoing. Should additional relevant documents or information become available to me, I may adjust or supplement my opinions as appropriate.

## II. SUMMARY OF OPINIONS

31. The following is a summary of my principal conclusions concerning class certification issues. This summary is provided for ease of use for the reader. The full set of my conclusions and analyses is contained in the body of this Report and the associated exhibits.

32. Many factors influenced CenturyLink's stock and bond prices over the multi-year Class Period proposed by Plaintiffs. Dr. Hartzmark's opinion that "the calculation of damages for violations of Section 10(b) of the Exchange Act ... are subject to a common methodology and may be computed on a class-wide basis for both the common stock purchasers and the 7.6[0]% Note purchasers"<sup>24</sup> is not well supported in the context of the facts of this particular case. Here, for the conceptual and empirical reasons elaborated on below and throughout my Report, neither the start, the end, nor the size of the inflation ribbon is subject to a common methodology that can be reliably computed on a class-wide basis. There has been no method proposed by Plaintiffs that would, from an economic perspective, accurately estimate, parse, and scale inflation, if any, from the combination of 52 alleged inflationary dates, five categories of alleged misrepresentations, an alleged "low cramming" period, and three alleged corrective disclosure dates.

33. Plaintiffs allege that each and every one of CenturyLink's quarterly earnings announcements and calls, its quarterly and annual SEC filings, and its remarks at multiple investment conferences over the entire 4+ year Class Period *all* contained combinations of the five categories of false and misleading statements or omissions. Plaintiffs, however, do not explain the significance of any particular alleged misstatement or omission—or even all the

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<sup>24</sup> Hartzmark Report, p. 6.

alleged misstatements and omissions combined—on any particular day. Nor do they describe how alleged misinformation would be separated from alleged fraud and the resulting measurement of inflation.

34. Based on research summarized in this Report, I have identified many new pieces of information on those specific days that have little or no relation to the “cramming” allegations that appear to be the heart of Plaintiffs’ allegations. Based on my training and experience evaluating the effects of such information as an economist, as well as my review and consideration of professional analyst commentary in response to all the news disclosed on those days, it is unclear what effect—if any—the alleged misstatements or omissions had on the price of CenturyLink’s stock price on the 52 alleged inflationary days identified by the Plaintiffs. As such, there is no way to reliably calculate when—or even if—the alleged inflation actually started for one or more categories of allegations, let alone how much inflation there may have been at any particular time associated with any particular allegation.

35. Complicating the matter further, Plaintiffs allege five different categories of allegedly inflationary misrepresentations, propose a long Class Period during which time CenturyLink and the telecom industry as a whole underwent massive change, and claim that CenturyLink’s cramming behavior and its revenue impact changed over this time period, including a period where the disputed activity effectively paused. However, Plaintiffs’ expert, Dr. Hartzmark, has not offered a damages model capable of identifying the price impact, if any, of the various types and degrees of allegedly inflationary misconduct and has not proposed how to separate price impacts attributable to other non-fraud factors in this dynamic economic context.

36. Furthermore, Plaintiffs allege three curative disclosure dates where similar and overlapping allegations were made public: June 16, June 19, and July 12, 2017. Based on research and analysis summarized in this Report, there are many reasons why it is far from certain that these are, in fact, curative disclosure dates that contain any actual news of one or more categories of fraud. First, the alleged curative disclosures are not disclosures of findings or facts, but simply disclosures of additional allegations contained in legal complaints and the beginning of an investigation. Second, news about suspicions, allegations, and investigations of cramming in the telecom industry had been publicly disclosed or available for many years prior to these mid-2017 alleged curative disclosure dates, and Plaintiffs have not proposed any method to identify the incremental effect, if any, of the allegations in this action. Third, the negative abnormal equity return on one of the three dates, June 19, 2017, has weak statistical significance in Plaintiffs' expert's event study model, and no statistical significance in much better fitting event study models. Similarly, one of the three dates, June 16, 2017, has no statistical significance for the 7.60% Notes in a better specified event study model than the one developed by Plaintiffs' expert. Fourth, it is unclear what, if any, additional substantive information was disclosed in any of the three, and especially the latter two allegedly curative disclosures. Fifth, analysis of intraday news events and subsequent stock price movements on these days reveals patterns that are inconsistent with a common reaction to a "revelation of the truth" and a uniform assessment of its impact.

### **III. BACKGROUND**

#### **A. Plaintiffs' Allegations**

37. Plaintiffs allege that CenturyLink routinely misquoted prices for services and improperly billed consumer and small business customers for services they did not request, a

practice they refer to as “cramming.”<sup>25</sup> Plaintiffs claim that CenturyLink and the Executive Defendants<sup>26</sup> named in the Action (collectively, “Defendants”) made materially false and misleading statements and omissions over the Class Period:

*Defendants falsely attributed CenturyLink’s substantial revenue and subscriber growth in its consumer and small business segments to the Company’s focus on ‘customer needs’ and its ‘customer first’ sales approach, competitive ‘bundling’ marketing strategy, and strict adherence to the Company’s Unifying Principles: ‘fairness, honesty and integrity.’*<sup>27</sup>

38. Plaintiffs claim that these statements misrepresented the Company’s current and projected financial condition, revenue, and earnings,<sup>28</sup> and led them to purchase Company securities at artificially inflated prices such that when Defendants’ statements and omissions were later revealed to be false and misleading, the price of CenturyLink’s securities dropped and Plaintiffs and the Class suffered losses.<sup>29</sup>

39. Plaintiffs describe five different categories of allegations relating to cramming and fraudulent billing, including potential fraud related to the Company’s (1) “customer first” business strategy, (2) financial performance drivers, (3) reasons given for its “fluctuating financial results,” (4) business practices related to sales and billing, and (5) “material omissions under Item 303 (management discussion of financial results).”<sup>30</sup> They further allege that the Company implemented an experimental “low cramming” period in the middle of the Class Period that

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<sup>25</sup> Complaint, ¶ 1.

<sup>26</sup> Executive Defendants in this action include CenturyLink’s former CEO Glen F. Post, III, former CFO R. Stewart Ewing, Jr., former Executive Vice President and Controller David D. Cole, former Global Head of Sales Karen Puckett, former President of Sales and Marketing Dean J. Douglas, and former Vice President and Treasurer G. Clay Bailey. *See* Complaint, p. 2.

<sup>27</sup> Complaint, ¶ 3.

<sup>28</sup> Complaint, ¶ 265.

<sup>29</sup> Complaint, ¶ 264.

<sup>30</sup> Complaint, ¶ 190.

significantly impacted revenues.<sup>31</sup> Plaintiffs also analogize their *allegations* of cramming-related misconduct to *findings* during the Class Period that a much larger financial institution, Wells Fargo, did in fact engage in fraudulent billing.<sup>32</sup>

40. Plaintiffs allege three curative disclosures regarding the Company's billing practices and financial condition:

- **Friday, June 16, 2017:** an article was published discussing a lawsuit filed by a former employee accusing CenturyLink of cramming.
- **Monday, June 19, 2017:** additional reports were published discussing the filing of a cramming-related consumer class action litigation.<sup>33</sup>
- **Wednesday, July 12, 2017:** the Minnesota Attorney General ("Minnesota AG") announced a lawsuit against the Company.<sup>34</sup>

#### **B. Summary of Dr. Hartzmark's Opinions**

41. As discussed earlier, Plaintiffs' expert, Dr. Hartzmark, provides five main opinions in his report. His first two opinions are that CenturyLink's common stock and CenturyLink's 7.60% Notes each traded in an efficient market throughout the Class Period.<sup>35</sup> His third opinion is that, although he was not asked to quantify actual damages, the calculations of damages for purchasers of both CenturyLink common stock and CenturyLink's 7.60% Notes are subject to a common methodology and may be computed on a class-wide basis.<sup>36</sup> His sole support for this

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<sup>31</sup> Complaint, ¶¶ 109–120.

<sup>32</sup> See, for example, Complaint, ¶ 16. "The truth concerning the Company's fraudulent practices began to be revealed on June 16, 2017, when Bloomberg published a story revealing that a CenturyLink whistleblower, Heiser, was fired after raising her concerns about the Company's fraudulent business practices with Defendant Post. That article, titled 'CenturyLink Is Accused of Running a Wells Fargo-Like Scheme,' addressed Heiser's account of CenturyLink's practice of charging customers for services they did not request, the striking parallels to the Wells Fargo scandal, [...]"

<sup>33</sup> Complaint, ¶ 17.

<sup>34</sup> Complaint, ¶¶ 18–19.

<sup>35</sup> Hartzmark Report, pp. 5–6.

<sup>36</sup> Hartzmark Report, pp. 5–6.

third opinion, in addition to the concept of subtraction, is that, according to his equity event study (his fourth opinion), the abnormal returns on the three alleged curative disclosure dates for CenturyLink's equity were negative and statistically significant,<sup>37</sup> and similarly (his fifth opinion) that the abnormal returns on the three alleged curative disclosure dates for CenturyLink's 7.60% Notes were negative and statistically significant using his bond price event study.<sup>38</sup>

### **C. Overview of CenturyLink and the U.S. Telecommunications Industry**

#### *1. Overview of CenturyLink's Business*

42. CenturyLink is an integrated telecommunications company headquartered in Monroe, Louisiana that primarily provides local and long-distance, broadband, voice, wireless, and managed services to households and businesses.<sup>39</sup> As of the start of the Class Period in 2013, it also offered entertainment services under the CenturyLink Prism TV and DIRECTV brands.<sup>40</sup> In 2011, following a series of major acquisitions (which I describe below), the Company expanded its services to include cloud hosting, managed hosting, colocation, and network services. As I also discuss below, the past decade has been a difficult one economically for companies providing services such as those offered by CenturyLink.

43. Over the Class Period, CenturyLink reported four non-financial operating metrics: access lines, broadband subscribers, Prism TV subscribers, and data centers. According to CenturyLink's SEC filings, access lines are lines reaching from the customer's premises to a

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<sup>37</sup> Hartzmark Report, p. 38.

<sup>38</sup> Hartzmark Report, Exhibit 21.

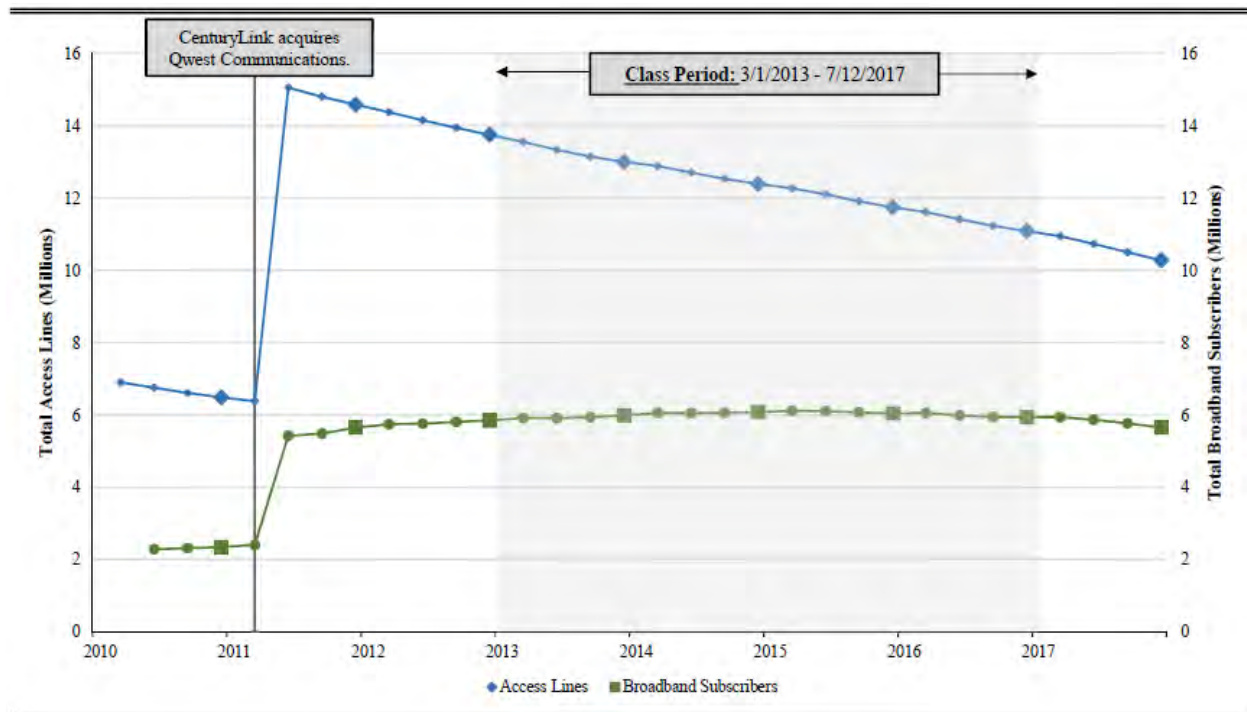
<sup>39</sup> "CenturyLink, Inc.," *MarketLine*, January 2013, p. 2. *See also* CenturyLink 10-K (2014), p. 3.

<sup>40</sup> CenturyLink 10-K (2013), pp. 6, 7.



connection with the public switched telephone network (“PSTN”)<sup>41</sup> and broadband subscribers are “customers that purchase [broadband] internet connection service through their existing telephone lines, stand-alone telephone lines, or fiber-optic cables.”<sup>42</sup> **Exhibit 1** provides information on trends in these operational metrics at CenturyLink between 2010 and 2018. **Exhibit 2** (replicated below as **Figure 1**), shows that between 2011 and 2018, there was a steady decline in access lines.

**Figure 1**  
**Selected CenturyLink Operational Metrics 2010-2017**



44. Over the same period, the number of broadband subscribers grew moderately from the time of the Qwest acquisition in Q2 2011, peaking at 6.1 million in Q1 2015, then shrank

<sup>41</sup> CenturyLink 10-K (2014), pp. 4, 5.

<sup>42</sup> CenturyLink 10-K (2014), p. 4.

moderately through the end of the Class Period. By the end of 2016, CenturyLink had 325,000 Prism TV subscribers and 58 data centers.<sup>43</sup> CenturyLink decided to discontinue Prism TV in or around 2018 and entered into an agreement to sell its data centers in 2016.<sup>44</sup>

## 2. *Recent Company History and Acquisitions*

45. Between 2009 and 2017, CenturyLink made a series of acquisitions that improved its offerings to its business customers by strengthening its platform-as-a-service and infrastructure-as-a-service offerings, disaster recovery operations, and “Big Data” and cloud service capabilities.<sup>45</sup> These include:

- On July 1, 2009, CenturyLink acquired Embarq, a provider of data, internet, video, and voice services for stock worth about \$6.1 billion in value on the date of the acquisition.<sup>46</sup>
- On April 1, 2011, CenturyLink acquired Qwest, a national and global provider of data, broadband, video, and voice services for an aggregate consideration of \$12.273 billion and the assumption of about \$12.7 billion in long-term debt.<sup>47</sup>
- On July 15, 2011, CenturyLink acquired Savvis, a provider of cloud hosting, managed hosting, colocation, and network services in domestic and international markets. The total consideration for the deal was \$2.382 billion.<sup>48</sup> After the acquisition of Embarq, Qwest, and Savvis, analysts noted that approximately 60 percent of CenturyLink’s topline revenue was derived from business services.<sup>49</sup>
- On October 31, 2016, CenturyLink entered a definitive merger agreement in which it proposed to acquire Level 3 Communications, another business-customer

<sup>43</sup> See **Exhibit 1**; CenturyLink 10-K (2016), pp. 5, 49.

<sup>44</sup> See CenturyLink 10-K (2016), pp. 5, 49; “CenturyLink no longer working to expand Prism TV service,” *FierceVideo*, April 10, 2018. Available at: <<https://www.fiercevideo.com/cable/centurylink-no-longer-working-to-expand-prism-tv-service>>.

<sup>45</sup> These acquisitions included AppFog, Inc., and Tier 4, Inc. in 2013, DataGardens and Cognilytics in 2014, and Orchestrate in 2015. See “Company History,” *CenturyLink*, accessed on February 29, 2020. Available at: <<https://news.centurylink.com/company-history>>.

<sup>46</sup> CenturyLink 10-K (2012), p. 4.

<sup>47</sup> CenturyLink 10-K (2012), p. 4.

<sup>48</sup> CenturyLink 10-K (2012), p. 3.

<sup>49</sup> “CenturyLink, Inc. 4Q12 Preview: Finishing a Strong 2012; Looking ahead to 2013,” *Morgan Stanley*, February 11, 2013, p. 3.

focused telecommunications company.<sup>50</sup> The acquisition was completed on November 1, 2017, a few months after the end of the Class Period.<sup>51</sup>

### 3. *Overview of the Telecommunications Industry During the Class Period*

46. The telecommunications market can be segmented into wireline telecommunication carriers, wireless telecommunication carriers, communications hardware manufacturers, and satellite and telecommunication resellers.<sup>52</sup> Wireline telecom companies like CenturyLink sell voice and data services, including traditional landline phone service, Voice over Internet Protocol (“VoIP”) calling service, internet connectivity, and television services through Internet Protocol Television (“IPTV”) to consumers. According to *Market Realist*, “[t]hey also sell advanced services in video conferencing, high bandwidth dedicated lines, and secured communication setups to their large customers.”<sup>53</sup>

47. The telecommunications industry experienced substantial challenges during the Class Period.<sup>54</sup> The wireline voice segment shrank as customers continued to migrate to wireless and VoIP services.<sup>55</sup> Firms like CenturyLink responded by offering bundled “triple play” services (phone, internet, and TV combined), which require a high-speed broadband network.<sup>56</sup>

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<sup>50</sup> CenturyLink 10-K (2016), p. 3. Level 3 Communications provides “communications and services like data, voice and video transmission for large enterprises.” (“CenturyLink, a Network Provider, to Acquire Level 3, a Rival,” *NYTimes*, November 1, 2016. Available at: <<https://www.nytimes.com/2016/11/01/business/dealbook/centurylink-a-network-provider-to-acquire-level-3-a-rival.html>>.)

<sup>51</sup> CenturyLink 10-K (2018), p. 6.

<sup>52</sup> “An overview of the US telecom industry,” *Market Realist*, January 16, 2015. Available at: <<https://marketrealist.com/2015/01/overview-us-telecom-industry/>>.

<sup>53</sup> “An overview of the US telecom industry,” *Market Realist*, January 16, 2015. Available at: <<https://marketrealist.com/2015/01/overview-us-telecom-industry/>>.

<sup>54</sup> “Top 10 risks in telecommunications 2014,” *EY*, 2014, p. 5.

<sup>55</sup> “Investor Must-know: Major Trends in the Wireline industry,” *Market Realist*, January 16, 2015. Available at: <<https://marketrealist.com/2015/01/investor-must-know-major-trends-wireline-industry/>>.

<sup>56</sup> See “Investor Must-know: Major Trends in the Wireline industry,” *Market Realist*, January 16, 2015. Available at: <<https://marketrealist.com/2015/01/investor-must-know-major-trends-wireline-industry/>>. The dramatic shifts in wireline and broadband segments of the industry are evident in a March 2018 report by a broadband industry trade

Industrywide, average revenue per user (“ARPU”) in North America fell at a compound annual rate of two percent over the years 2011–2016.<sup>57</sup> In 2014, Ernst & Young noted: “[A] number of structural pressures — from regulation on core service areas to increased competition from over-the-top (‘OTT’) players [such as Skype] — mean that market conditions remain challenging.”<sup>58</sup> By 2017, according to a report by PwC, many telecom carriers were facing “significant decreases in their basic communication service revenues ... [c]ombined with intense competition due to lagging industry consolidation, this pattern has led to steep declines in average revenue per user; at best, minimal revenue growth; and tightening margins.”<sup>59</sup>

#### 4. *CenturyLink’s Prospects, Growth, and Stock Price During the Class Period*

48. In January 2013, a report by *MarketLine* identified CenturyLink’s “broad portfolio of offerings” and “robust network infrastructure” as strengths, but noted the Company’s “declining profit margins” and “significant debt obligations” as weaknesses.<sup>60</sup> The same report identified several threats to the Company, including intense competition, the prospect of significant regulation, and technological change.<sup>61</sup>

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association, USTelecom. The report projected that between 2000 and 2017, wired residential connections had declined from about 120 million to 19 million while residential broadband connections over the same time period had increased from five to about 100 million. As of 2017, it estimated that nearly 80 percent of U.S. household had fixed broadband (“high-speed internet”). See “USTelecom: Industry Metrics and Trends 2018,” *USTelecom*, March 2018, pp. 3, 4, 14, and 15. Available at: <<https://www.ustelecom.org/wp-content/uploads/2018/12/USTelecom-Industry-Metrics-and-Trends-2018.pdf>>.

<sup>57</sup> “2017 Telecommunications Trends: Aspiring to digital simplicity and clarity in strategic identity,” *PwC Strategy&*, 2017, p. 5.

<sup>58</sup> “Top 10 risks in telecommunications 2014,” *EY*, 2014, p. 5.

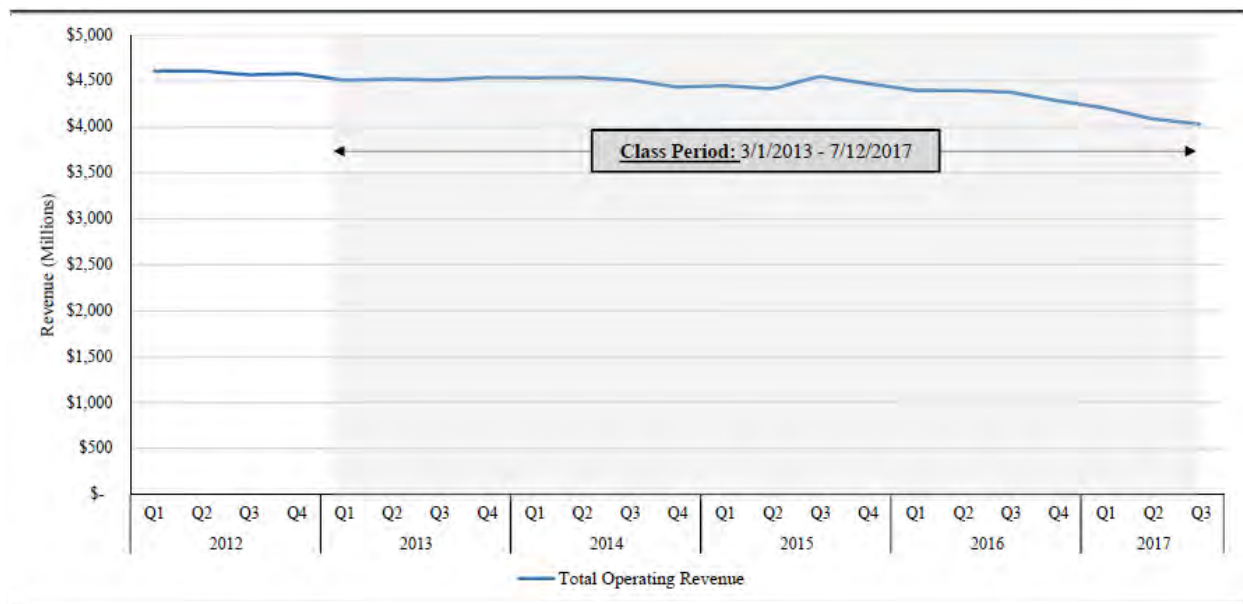
<sup>59</sup> “2017 Telecommunications Trends: Aspiring to digital simplicity and clarity in strategic identity,” *PwC Strategy&*, 2017, p. 4.

<sup>60</sup> “CenturyLink, Inc.,” *MarketLine*, January 2013, p. 30.

<sup>61</sup> “CenturyLink, Inc.,” *MarketLine*, January 2013, pp. 33–34.

49. From the start of the Class Period in March 2013 to Q3 2015, CenturyLink's quarterly operating revenue had remained relatively stable at around \$4.5 billion. Starting with Q4 2015, CenturyLink's quarterly operating revenue declined steadily to end at about \$4.1 billion in Q2 2017, near the end of the Class Period. (See **Exhibit 3**, replicated as **Figure 2** below.)

**Figure 2**  
**Quarterly Total Operating Revenue 2012-2017**



50. Between 2013 and 2017, revenue from CenturyLink's Legacy services and Strategic services declined and rose, respectively (See **Exhibit 4A** and **Exhibit 4B**.) By 2014, Legacy services (primarily local and long-distance wireline calling) contributed approximately half of CenturyLink's Consumer revenue. These services faced high line attrition and intense competition and product switching from cable and wireless. According to a 2015 research report by Cowen and Company, "the legacy services story is about managing the natural decline (down

7.2% Y/Y in 2014) due to migration/substitution.”<sup>62</sup> The same report projected a compound annual growth rate (“CAGR”) of -5.2% in the Company’s Consumer Legacy services over the years 2015–2020.<sup>63</sup> A May 2016 Wells Fargo report noted that, “the ‘good’ part of CTL’s revenue (Strategic Services) is growing at a slower rate than its legacy revenue declines. In addition, the declining revenue is higher margin than the growth revenue.”<sup>64</sup> Strategic Services “enable ... customers to access the Internet, connect to private networks and transmit data, and enhance the security, reliability, and efficiency of ... customers’ communications.”<sup>65</sup>

51. Consistent with the economic challenges in the industry, the overall trend in CenturyLink’s stock price over the Class Period was downward (*see Exhibit 5A*, replicated below as **Figure 3**.)

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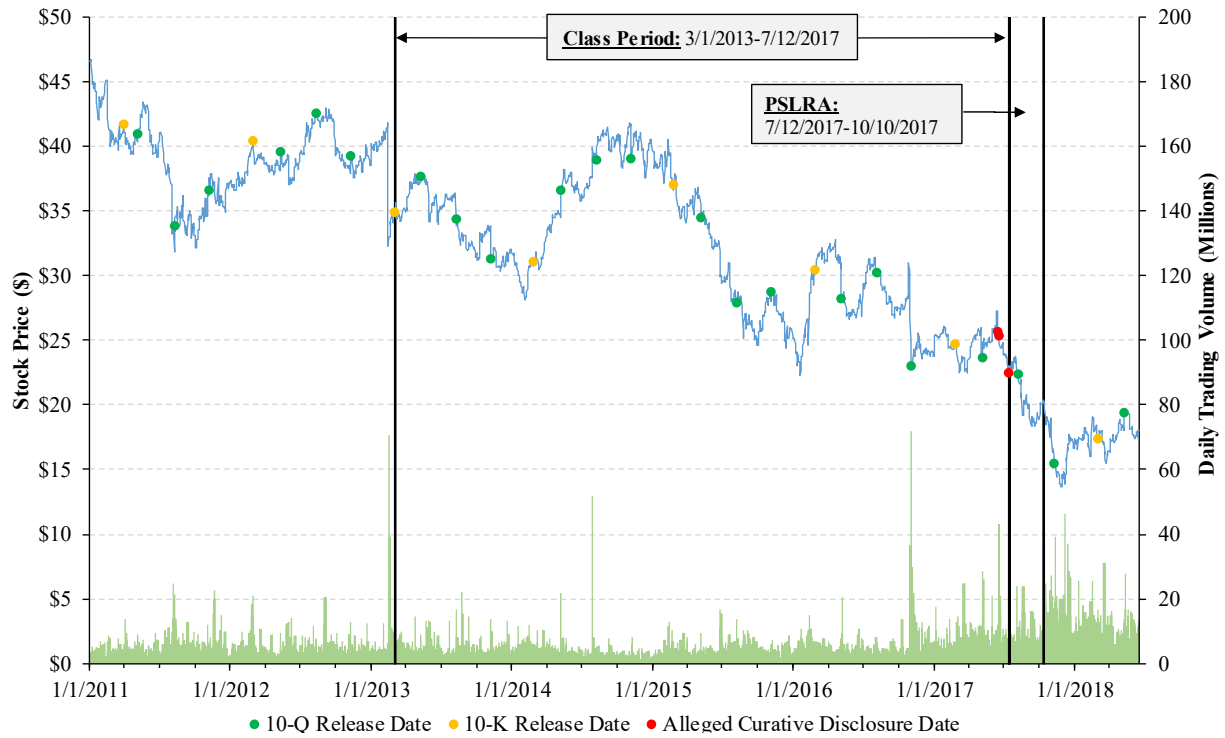
<sup>62</sup> “Initiate: Compelling Turnaround Story, but We Look for Top-Line Stability First,” *Cowen and Company*, October 13, 2015, pp. 15–16.

<sup>63</sup> “Initiate: Compelling Turnaround Story, but We Look for Top-Line Stability First,” *Cowen and Company*, October 13, 2015, pp. 15–16.

<sup>64</sup> “CTL: Downgrading To Market Perform: It Was A Fun Run; But LT Structural Concerns Exist,” *Wells Fargo*, May 3, 2016, p. 1.

<sup>65</sup> CenturyLink 10-K (2016), p. 7.

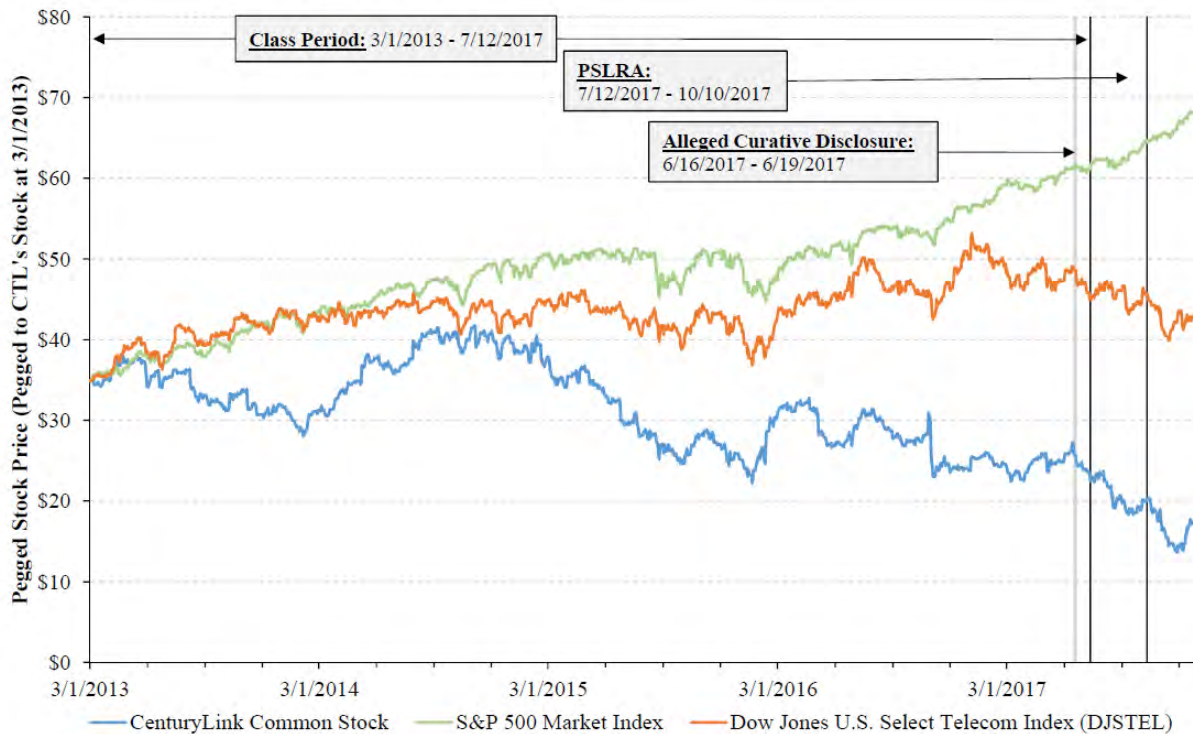
**Figure 3**  
**CenturyLink Common Stock Price and Volume**  
**Jan 2011 - June 2018**



52. CenturyLink's stock price also substantially underperformed the broader market and industry. (See **Exhibit 5B**, replicated below as **Figure 4**.)



**Figure 4**  
**CenturyLink Common Stock Price with Pegged Market and Industry Indices**  
**March 2013 - December 2017**



#### IV. ECONOMIC FRAMEWORK: FOCUS ON ALLEGEDLY INFLATIONARY STATEMENTS

53. As discussed, Dr. Hartzmark did not provide any substantive analysis associated with the economic framework in this Action. Rather, he simply assumed that Plaintiffs' allegations were true. While a full loss causation analysis is typically done at a later stage of the litigation, in assessing common issues, it is important from an economic perspective to evaluate the allegations and identify the reasonableness of an assumption of truth and how, if at all, the combination of categories of allegations, alleged inflation dates, and alleged corrective disclosure dates would translate into a common method of calculating damages. In this section, I provide economic analysis to show that an overarching assumption of truth of the allegations in



the Complaint is neither warranted nor sufficient to support a conclusion that a common method of estimating price inflation can be developed in this Action.

**A. General Allegations of Fraudulent Billing Practices in the Telecom Industry and at CenturyLink Were Not News**

54. Implicit in the assumption of the complete accuracy of the allegations in the Complaint is an underlying assumption that investors were unaware of the types of information in the corrective disclosures prior to their disclosure. If that is not the case, then one must be able to identify how those allegations differ from the prior general disclosures that were known to investors. Dr. Hartzmark does none of this analysis.

55. I find that the underlying premise that the alleged curative disclosures were effectively revelations of a previously unknown truth is unsupported. Allegations of cramming, or charging “unauthorized, misleading, or deceptive charges in a consumer’s telephone bill,”<sup>66</sup> are nothing new, and date back at least to the 1990s (well before the beginning of the Class Period), when telecom companies began offering third-party services. These third-party companies were able to add extra charges through the telecom companies’ billing platforms.<sup>67</sup> News of these, and similar, concerns have been widespread ever since, and carriers as well as third-party providers have repeatedly been publicly implicated. The U.S. government has performed numerous investigations into the issue of “cramming,” and lawsuits and enforcement action against several major U.S. telecom providers—including CenturyLink—have been well-publicized.

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<sup>66</sup> “Telecommunications: Updates on State-Level Cramming Complaints and Enforcement Actions,” *The U.S. Government Accountability Office (GAO)*, January 31, 2000, p. 2.

<sup>67</sup> “Unauthorized Charges on Telephone Bills, Staff Report for Chairman Rockefeller,” *The Committee on Commerce, Science, and Transportation*, July 12, 2011, p. i (cited in Complaint, ¶ 45).

*1. The Pervasiveness of Cramming Allegations and Enforcement Actions Across the U.S. Telecommunications Industry Is a Well-Publicized Issue*

56. Examples of public disclosures regarding allegations and investigations of cramming in the U.S. telecom sector, as well as enforcement actions against major U.S. telecom providers over the past 20 years abound. Examples of such disclosures include the following:

- In October 1999, the U.S. Government Accountability Office (“GAO”) testified before the U.S. Senate Committee on Small Business about the severity of cramming, primarily by billing aggregators and vendors:

*Overall, we found that consumers' complaints to state authorities about **cramming** rose dramatically from about 850 in 1996 to nearly 20,000 in 1998. While only 3 states reported receiving **cramming** complaints in 1996, the total increased to 36 states by 1998. At the federal level, **cramming** complaints became the fourth most common type of written complaint received by the Federal Communications Commission (FCC) and the second most common type of complaint received by the Federal Trade Commission (FTC) during 1998. Four major regional telephone companies reported to us that they received a combined total of about 160,000 unconfirmed **cramming** complaints during 1998, and a fifth company reported substantially more than that number during 1998.<sup>68</sup>*  
[Emphasis added]

- In January 2000, the GAO testified to Congress on cramming again, reporting additional evidence of ongoing abuse, and noting that “[p]hone companies can **cram** consumers by adding unauthorized charges for telephone services, such as call messaging.”<sup>69</sup> [emphasis added]
- In July 2011, the Committee on Commerce, Science and Transportation published an extensive report of its investigation into cramming, as requested by then-Chairman Senator John D. (Jay) Rockefeller. Companies solicited for the investigation included CenturyLink, Windstream, Frontier Communications, AT&T, Verizon, and Qwest. According to the report, “[t]he evidence obtained through this investigation suggests that third-party billing is causing extensive financial harm to all types of landline telephone customers” and that “over the past decade, telephone customers appear to have been scammed out of billions of

<sup>68</sup> “Overview of the Cramming Problem,” *GAO*, October 25, 1999, p. 1.

<sup>69</sup> “Telecommunications: Updates on State-Level Cramming Complaints and Enforcement Actions,” *The U.S. Government Accountability Office (GAO)*, January 31, 2000.

dollars through third-party billing.”<sup>70</sup> The report described cramming as a “nationwide problem,”<sup>71</sup> and went on to explain how telephone companies, in addition to third-party vendors, benefit from cramming:

***Telephone companies profit from cramming.** Over the past decade, telephone companies have generated over \$1 billion dollars in revenue by placing third-party charges on their customers’ telephone bills. Since 2006, AT&T, Qwest, and Verizon have earned more than \$650 million through third-party billing. Verizon explained that it—receives a flat fee between \$1 and \$2 per charge for placing third-party charges on its customers’ bills. Because telephone companies generate revenue by placing third-party charges on their customers’ bills, telephone companies profit from cramming. Documents reviewed by the Committee staff show that some telephone company employees feel financial pressure to approve third-party vendors even though the companies appear to be crammers.*<sup>72</sup>

- In July 2012, the FTC reported that cramming is also an issue for wireless phone customers, noting that in recent years “the FTC and FCC have reviewed thousands of complaints about unauthorized third-party charges on wireless bills. The number of reported complaints undoubtedly understates the full extent of wireless **cramming** by a substantial amount.”<sup>73</sup> [emphasis added]
- In August 2012, *Consumer Reports Magazine* published an article titled “Beware of bogus phone-bill fees” which reported that “[t]he FCC estimates that 15 to 20 million landline customers are **crammed** each year” and advised “[d]on’t rely on your telecom provider to weed out the [unauthorized] charges.”<sup>74</sup> [emphasis added]
- An FTC Report published in July 2014 discussed various enforcement actions the Commission had taken. While the report focused on mobile cramming, it also noted that the FTC “ha[d] brought over thirty cases to stop landline **cramming** and return money to customers.”<sup>75</sup> [emphasis added]

<sup>70</sup> “Unauthorized Charges on Telephone Bills, Staff Report for Chairman Rockefeller,” *The Committee on Commerce, Science, and Transportation*, July 12, 2011, p. i (cited in Complaint, ¶ 45.)

<sup>71</sup> “Unauthorized Charges on Telephone Bills, Staff Report for Chairman Rockefeller,” *The Committee on Commerce, Science, and Transportation*, July 12, 2011, p. i (cited in Complaint, ¶ 45.)

<sup>72</sup> “Unauthorized Charges on Telephone Bills, Staff Report for Chairman Rockefeller,” *The Committee on Commerce, Science, and Transportation*, July 12, 2011, p. iii (emphasis original, cited in Complaint, ¶ 45.)

<sup>73</sup> “FTC Calls Wireless Phone Bill Cramming a Significant Consumer Problem,” *The Federal Trade Commission (FTC)*, July 23, 2012.

<sup>74</sup> “Beware of bogus phone-bill fees,” *Consumer Reports Magazine*, August 2012.

<sup>75</sup> “Mobile Cramming, an FTC Staff Report,” *FTC*, July 2014, p. 7.

- Also in July 2014, another Senate hearing about cramming on wireless phone bills described the practice as “widespread” and having “caused consumers substantial harm.”<sup>76</sup>
- Over the course of 2014 and 2015, the federal government made cramming settlements with all four major U.S. wireless carriers. In October 2014, AT&T settled for \$105 million, in December 2014, T-Mobile settled for \$90 million, and in May 2015, Verizon and Sprint settled for \$90 million and \$68 million, respectively.<sup>77</sup>

2. *Cramming Allegations and Enforcement Actions Against CenturyLink Have Also Been Well-Publicized for Years*

57. While there has been broadly disseminated news about cramming in the telecommunications industry as a whole over the past 20 years, there have also been well-publicized reports and allegations of cramming *specific to CenturyLink* prior to the beginning of the proposed Class Period and for years before the alleged curative disclosures in this Action. Examples of such disclosures include the following:

- In 2012, U.S. Senator Amy Klobuchar attempted to pass legislation to fight cramming at Verizon, AT&T, and CenturyLink.<sup>78</sup>
- In October 2013, news outlets reported that SCS Communication Systems filed a complaint against CenturyLink, “alleging that CenturyLink has failed to disconnect three accounts and continues to bill the company.” The company specifically charged CenturyLink with violating local anti-cramming and slamming statutes.<sup>79</sup>
- In March 2014, public media reported a \$2.3 million CenturyLink settlement over cramming allegations in Florida.<sup>80</sup>

<sup>76</sup> “Cramming on Wireless Phone Bills: A Review of Consumer Protection Practices and Gaps; Hearing before the Committee on Science and Transportation United States Senate One Hundred Thirteenth Congress,” *US Government Publishing Office*, Second Session, July 30, 2014, p. 10.

<sup>77</sup> “Verizon and Sprint to pay \$158 million for cramming charges on customers’ bills,” *The Verge*, May 12, 2015; Complaint, ¶ 51.

<sup>78</sup> “Klobuchar cosponsors legislation to crack down on phone cramming - bill would ban most third-party charges on landline phones; last year, Klobuchar successfully pressed Verizon, AT&T, and CenturyLink to stop placing deceptive third-party charges on landline phone bills,” *Congressional Documents and Publications*, June 12, 2013.

<sup>79</sup> “PRC directs CenturyLink to respond to complaint,” *TR’s State NewsWire*, October 24, 2013.

<sup>80</sup> “Fishy phone charges? You can seek refund State urges ‘cramming’ victims to reply to notices,” *The Orlando Sentinel*, March 28, 2014.

- Later in 2014, CenturyLink’s settlement with the Washington Utilities and Transportation Commission was publicized.<sup>81</sup>
- In September 2015, the SEC raised public concern about CenturyLink’s financial reporting, and specifically questioned the company’s transparency on revenue streams.<sup>82</sup>
- In October 2016, the Seattle Office of Cable Communications investigated CenturyLink after a rise in billing complaints beginning in 2013.<sup>83</sup>
- In January 2017, a pattern of billing complaints against CenturyLink in Denver, Colorado, also made headlines on Fox News.<sup>84</sup>
- In February 2017, a resident in Portland, Oregon reported billing complaints, fueling media reports of vast consumer complaints against CenturyLink across the state.<sup>85</sup>
- In April 2017, the State of Iowa Department of Commerce Utilities Board filed a report alleging CenturyLink cramming practices.<sup>86</sup>

58. These examples provide an economic framework within which to consider the allegations in this Action. Complaints about cramming and related issues have been around in the telecommunications industry for decades. Because concern about such matters was already well-known, the allegations themselves do not, on their face, constitute new information, and as such would not be expected to dissipate meaningful price inflation if such price inflation were in CenturyLink’s securities price at that time, as is expected with a corrective disclosure. Dr. Hartzmark has done nothing to show that the alleged curative disclosures were, in fact, materially different than the long history of concerns about cramming in the industry. The

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<sup>81</sup> “CenturyLink to pay \$30K to settle billing complaint,” *TR’s State NewsWire*, August 4, 2014; “CenturyLink settles with UTC staff over billing complaint,” *TR’s State NewsWire*, July 8, 2014.

<sup>82</sup> The Securities Exchange Commission (SEC), September 8, 2015 (cited in Complaint, ¶ 123).

<sup>83</sup> “CenturyLink held accountable for billing, service issues,” *KING5 News*, October 6, 2016 (cited in Complaint, ¶ 242).

<sup>84</sup> “Denver Better Business Bureau issues warning about CenturyLink,” *Fox News Denver*, January 27, 2017 (cited in Complaint, ¶ 245).

<sup>85</sup> “Growing pains: CenturyLink consumer complaints spike as service expands,” *KGW8*, February 1, 2017.

<sup>86</sup> Iowa Communications Alliance Reply Comments *In Re: Deregulation of Local Exchange Services*, Docket No. INU-2016-0001, April 21, 2017.

alleged curative disclosures are not findings or resolutions of allegations, but simply more lawsuits and investigations, occurring in an environment of FUD associated with the recent Wells Fargo-type concerns.

**B. There Was Little Positive Price Reaction to Alleged Misstatements and Little Correlation Between Earnings and Revenue Surprises and Price Reaction**

59. Also implicit in the assumption of the accuracy of the allegations in the Complaint is an assumption that the alleged inflationary dates actually *created inflation* and that the inflation was reasonably linked to the Complaint’s allegations. Dr. Hartzmark has conducted no analysis of the plausibility or measure of inflation associated with any alleged inflationary statements. From an economic perspective, even if one is not doing a complete loss causation analysis, it is important to at least consider and analyze the economic framework when offering opinions relevant to the common measurement of economic damages.

60. In this section, I discuss the “front-end” alleged inflationary statements. The Complaint identifies several alleged misleading statements made by the Defendants on 38 “market” dates during the Class Period that relate to revenue. **Exhibit 18A** lists 38 dates on which the Complaint alleges revenue-related misstatements.<sup>87</sup> **Exhibit 18B** lists an additional 18 dates on which the Complaint alleges other misstatements.<sup>88</sup> The revenue-related statements are frequently about CenturyLink’s Consumer segment revenue, at times more narrowly focusing on Consumer Strategic revenue. Several attributes of these statements are notable. The alleged inflationary statements were made in a variety of settings, including earnings releases, earnings

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<sup>87</sup> Complaint, Appendix A.

<sup>88</sup> These alleged misstatements are listed in various parts of the Complaint. I have noted each non-revenue misstatement and its location in the Complaint in **Exhibit 18C**.

calls, 8-K, 10-K and 10-Q filings, and at four separate investor conferences. These are “information-rich” events in which investors learn an array of new information. For instance, on a quarterly earnings announcement date, a company may release information about key financial and non-financial metrics, reveal capital expenditure and asset-related information, discuss dividends and/or buybacks, and a wide range of additional information. The information generally comes out (1) in a press release of results; (2) by a conference call with analysts and investors where the company discusses the quarterly results, explains nuances in the results, and answers analyst and investor questions; and (3) in the company’s SEC filings (10-Qs for each fiscal quarter and 10-Ks for each fiscal year). For example, in the case of CenturyLink during the Class Period, its 2Q earnings releases each year from 2013–2017 contained nearly 20 to over 35 metrics, and its 4Q/FY earnings releases from 2013–2016 contained nearly 35 to over 40 metrics. This is in addition to commentary around these numbers and other topics. (See **Exhibit 6** and **Exhibits 7A - 17A**.) In summary, on information-rich days such as these, there are large amounts of complex information disclosed. Dr. Hartzmark has not conducted any analysis to even plausibly parse the effect of the alleged misrepresentations or categories of misrepresentations from non-false information, which would be necessary to connect any statements to a common measure of damages or price inflation, nor has he outlined a methodology for doing so.

61. It is in this information-rich environment that the Complaint alleges that general statements such as the following were significant enough to have altered a reasonable investor’s expectation of future cash flows:<sup>89</sup>

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<sup>89</sup> Complaint, Appendix A, pp. 1–5.



- The Consumer segment realized continued strategic revenue growth driven by increased high-speed Internet and CenturyLink® Prism™ TV subscribers.  
Source: Q1 2013 Form 8-K (May 8, 2013).
- The Consumer segment realized continued strategic revenue growth driven by year-over-year increased high-speed Internet and CenturyLink® Prism™ TV subscribers. Source: Q2 2013 Form 8-K (August 7, 2013).
- The Consumer segment realized continued strategic revenue growth driven by increased high-speed Internet and CenturyLink® Prism™ TV subscribers, along with price increases for selected services. Source: Q3 2013 Form 8-K (November 6, 2013).
- The Consumer segment achieved strong strategic revenue growth driven by increased high-speed Internet and CenturyLink® Prism™ TV subscribers, along with price increases on certain products and lower customer churn. Source: Q1 2014 Form 8-K (May 7, 2014).
- The Consumer segment achieved year-over-year revenue growth driven by increased high-speed Internet and CenturyLink Prism TV customers and price increases on certain products. Source: Q2 2014 Form 8-K (August 6, 2014).

62. As these examples from the Complaint illustrate, these alleged misstatements were general and typically *did not* convey new or obviously inaccurate information to investors. Indeed, they often repeated boilerplate, commonplace messages. As noted earlier, the overall challenges in the industry were such that no informed investor would reasonably review the actual data and conclude that CenturyLink was, for example, a company with strong organic



revenue growth. There is nothing to suggest that these statements were largely positive (and thus inflationary) surprises, or that these general revenue statements would have stood out amongst the range of information being released on the same day and altered investors' beliefs about the value of CenturyLink's securities.

63. In addition to the specific revenue misstatements that the Complaint notes in Appendix A, there are an additional 18 alleged misstatements that are listed in various parts of the Complaint. I have listed each such alleged misstatement in **Exhibit 18C**. To distinguish this set from the set of alleged misstatements noted in Complaint Appendix A, I refer to these alleged misstatements collectively as the alleged "non-revenue misstatements."

64. Similar to the alleged revenue misstatements, the non-revenue misstatements typically *did not* convey new or obviously inaccurate information to investors. For instance, the alleged misstatement on five of the 18 dates is the following sentence regarding bundling strategy that was included in five Proxy statements released on different dates, among other SEC filings:

- "Helped mitigate legacy service declines: As part of its effort to 'mitigate' declines in its legacy services, the Company remained 'focused on efforts to ... promote long-term relationships with our customers through bundling of integrated services.'"<sup>90</sup>

65. As another example, the Complaint also notes the following as a false statement from CenturyLink's former CFO Stewart Ewing:

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<sup>90</sup> Complaint, ¶ 205, note 9.

- “... during investor conference calls on March 9, 2015, June 4, 2015 and March 7, 2016, Defendant Ewing stated ‘[w]e’re committed to being the broadband leader in our markets, offering advanced broadband services that meet the needs of our customers.’”<sup>91</sup>

66. As I have noted earlier, no reasonable investor would view these general, boilerplate statements as altering the rich mix of information publicly available to CenturyLink investors from numerous sources. It is unlikely that statements such as these and others noted in **Exhibit 18C** were considered by investors as large positive surprises which would introduce artificial inflation into the price, even if the allegations regarding the falsity of such statements were true.

*1. Economic Evaluation of 52 Alleged Inflationary Statement Days*

67. To illustrate both the need for economic evaluation and the complexity of conducting such an analysis, I evaluated CenturyLink’s stock price reaction to the alleged inflationary misstatements and present those results in **Exhibits 18A** and **18B**. Some of the alleged revenue misstatements were made after 4 PM ET, which is the close of trading for CenturyLink’s stock. Therefore, their potential impact on CenturyLink’s securities prices would be felt on the following trading day. If a separate misstatement was alleged on that following trading day (before 4:00 PM), any price impact(s) for the two consecutive-day disclosures would be felt on the same day. As such, I find that the 38 alleged revenue misstatements could have potentially affected CenturyLink’s stock price on 35 distinct trading (or “market”) days. **Exhibit 18B** lists an additional 18 dates on which the Complaint alleges other misstatements. Since one

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<sup>91</sup> Complaint, ¶ 197.

of the 18 dates overlaps with the 35 dates identified for assessing alleged revenue misstatement impact, the total number of days on which I assess CenturyLink's stock price reaction to the alleged inflationary misstatements is 52 ("Abnormal Return Measurement Dates".) For each date, I evaluated whether the abnormal return on CenturyLink's stock, after eliminating the impact of industry and market wide factors,<sup>92</sup> is positive and statistically significant, negative and statistically significant, or not statistically significantly different from zero.

68. In the figure below (also shown as **Exhibit 18D**), I list each of the 52 Abnormal Return Measurement Dates, abnormal returns on that date, and provide an example of mapping to the Plaintiffs' categories of misstatements.<sup>93</sup> As discussed, Dr. Hartzmark has not identified how the combination of the 52 alleged inflation days and the five categories of misrepresentations would be used to develop estimates of inflation under various combinations of findings. It is clear from reviewing this figure just how complex any exercise of inflation estimation would be. As an example of the complexity, each of the five categories of alleged misrepresentations implicates between 1 and 14 of the 52 different possible dates, and most dates have multiple categories of misrepresentation, which will require further within-day scaling and parsing of any inflation estimates.

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<sup>92</sup> For these calculations, I use the Deal Model for my event study, which I discuss later in my report.

<sup>93</sup> The mapping shown in the figure is simply an example. Neither the Complaint nor Dr. Hartzmark's report even attempt such a mapping.

**Figure 5**  
**Overview of the 52 Alleged Inflationary Dates**  
**(Statistically Significant Positive and Negative Abnormal Price Changes are Bolded)**

Mapping to Categories of Alleged Misstatements										
Announcement Date	Abnormal Return Measurement Date	Revenue Misrepresentation in Complaint Appendix A	(1) "Customer First" Strategy, Customer Needs, Bundling	(2) Reasons and Factors Driving the Company's Financial Performance	(3) Reasons Behind Fluctuating Financial Results	(4) Business Conduct and Sales Practices	(5) Material Omissions Under Item 303 (Mgmt. Discussion of Financial Results)	Announcement Type	Abnormal Return	t-Statistic
[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]
[1]	1-Mar-2013	1-Mar-2013						10-K	1.1%	0.51
[2]	10-Apr-2013	10-Apr-2013						SEC Form DEF 14A	(0.9%)	(0.41)
[3]	8-May-2013	9-May-2013						Earnings Announcement	0.9%	0.44
[4]	10-May-2013	10-May-2013						10-Q	0.0%	0.01
[5]	7-Aug-2013	8-Aug-2013						Earnings Announcement	(5.8%)	<b>(7.09)</b>
[6]	8-Aug-2013	9-Aug-2013						10-Q	(1.1%)	(1.20)
[7]	6-Nov-2013	7-Nov-2013						Earnings Announcement	(4.7%)	<b>(4.66)</b>
[8]	7-Nov-2013*	8-Nov-2013						10-Q	(2.3%)	<b>(2.11)</b>
[9]	10-Dec-2013	10-Dec-2013						Investor Conference	0.7%	0.63
[10]	12-Feb-2014	13-Feb-2014						Earnings Announcement	1.0%	1.02
[11]	27-Feb-2014	27-Feb-2014						10-K	0.1%	0.07
[12]	16-Apr-2014	16-Apr-2014						SEC Form DEF 14A	1.2%	1.21
[13]	7-May-2014	8-May-2014						Earnings Announcement	6.3%	<b>7.86</b>
[14]	8-May-2014*	9-May-2014						10-Q	(1.2%)	(1.19)
[15]	12-Jun-2014	12-Jun-2014						Investor Conference	0.2%	0.16
[16]	6-Aug-2014	7-Aug-2014						Earnings Announcement	0.6%	0.59
	7-Aug-2014	7-Aug-2014						10-Q	-	-
[17]	5-Nov-2014	6-Nov-2014						Earnings Announcement	(5.8%)	<b>(6.45)</b>
[18]	6-Nov-2014	7-Nov-2014						10-Q	0.4%	0.34
[19]	11-Feb-2015	12-Feb-2015						Earnings Announcement	(3.7%)	<b>(3.47)</b>
[20]	24-Feb-2015	25-Feb-2015						10-K	(0.4%)	(0.29)
[21]	9-Mar-2015	9-Mar-2015						Investor Conference	(0.7%)	(0.59)
[22]	8-Apr-2015	8-Apr-2015						SEC Form DEF 14A	0.7%	0.57
[23]	5-May-2015	6-May-2015						Earnings Announcement	(1.7%)	(1.46)
[24]	6-May-2015	7-May-2015						10-Q	1.0%	0.85
[25]	4-Jun-2015	4-Jun-2015						Investor Conference	0.3%	0.30
[26]	24-Jun-2015	24-Jun-2015						Financial Analyst Day	(1.3%)	(1.11)
[27]	5-Aug-2015	6-Aug-2015						Earnings Announcement	(1.7%)	(1.43)
	6-Aug-2015	6-Aug-2015						10-Q	-	-
[28]	12-Aug-2015	12-Aug-2015						Oppenheimer Conference	1.5%	1.29
[29]	22-Sep-2015	22-Sep-2015						Response Letter to the SEC	(0.3%)	(0.28)
[30]	4-Nov-2015	5-Nov-2015						Earnings Announcement	3.1%	<b>2.73</b>
[31]	5-Nov-2015	6-Nov-2015						10-Q	(0.4%)	(0.36)
[32]	7-Dec-2015	7-Dec-2015						Investor Conference	2.4%	<b>1.98</b>
[33]	10-Feb-2016	11-Feb-2016						Earnings Announcement	10.7%	<b>8.44</b>
[34]	24-Feb-2016*	25-Feb-2016						10-K	0.6%	0.36
[35]	7-Mar-2016	7-Mar-2016						Investor Conference	(0.3%)	(0.19)
[36]	5-Apr-2016	6-Apr-2016						SEC Form DEF 14A	0.7%	0.43
[37]	6-Apr-2016	7-Apr-2016						AZ Assurance of Discontinuance	(0.8%)	(0.47)
[38]	4-May-2016	5-May-2016						Earnings Announcement	(6.8%)	<b>(4.21)</b>
	5-May-2016	5-May-2016						10-Q	-	-
[39]	3-Aug-2016	4-Aug-2016						Earnings Announcement	(0.8%)	(0.59)
[40]	4-Aug-2016	5-Aug-2016						10-Q	(1.1%)	(0.83)
[41]	21-Sep-2016	21-Sep-2016						Goldman Sachs Conference	(0.1%)	(0.07)
[42]	6-Oct-2016	6-Oct-2016						Statement to News Source	0.3%	0.25
[43]	18-Oct-2016	18-Oct-2016						Statement to News Source	1.4%	1.13
[44]	31-Oct-2016	31-Oct-2016						Earnings Announcement	(12.7%)	<b>(9.82)</b>
[45]	4-Nov-2016	4-Nov-2016						10-Q	(0.4%)	(0.21)
[46]	27-Jan-2017	30-Jan-2017						Statement to News Source	0.2%	0.10
[47]	1-Feb-2017	2-Feb-2017						Statement to News Source	(0.1%)	(0.04)
[48]	8-Feb-2017	9-Feb-2017						Earnings Announcement	(0.6%)	(0.30)
[49]	22-Feb-2017*	23-Feb-2017						10-K	0.6%	0.31
[50]	13-Apr-2017	13-Apr-2017						SEC Form DEF 14A	1.0%	0.55
[51]	3-May-2017	4-May-2017						Earnings Call	(5.2%)	<b>(5.37)</b>
[52]	25-May-2017	25-May-2017						Statement to News Source	(0.6%)	(0.53)
Total			38	14	10	3	6	1		

69. As another example of the complexity of this exercise, one can consider how certain information on the subset of earnings announcement dates among the 52 alleged inflation dates compared to investor expectations. From a financial perspective, market participants

typically compare the actual and forecasted values of the metrics that are announced that day by the company against their expectations. For example, extensive prior academic research has shown that, on average, the market reaction on earnings announcement days is consistent with the “earnings surprise.”<sup>94</sup> For the dates that are associated with earnings releases, I review the earnings per share (EPS) and revenue “surprises,” as shown in **Exhibit 18E**. I summarize and discuss the findings of abnormal returns and earnings surprises below.

70. Seventeen of the 52 alleged inflationary dates are also earnings announcement dates. Seven of these 17 allegedly inflationary earnings announcement dates had *negative* abnormal returns; in other words, on seven days on which the Company allegedly made inflationary statements, the stock price actually *fell* (after controlling for market and industry effects). Furthermore, two of these seven allegedly inflationary earnings announcement dates with statistically significant negative abnormal returns also featured negative earnings surprises (*i.e.*, earnings were below the consensus analyst forecast), while the other five had positive or zero earnings surprises (*i.e.*, earnings were above or at the consensus analyst forecast). On three of these 17 allegedly inflationary earnings release dates, abnormal returns were significantly positive and so was the earnings surprise. Dr. Hartzmark has offered no methodology to disentangle the positive impact of the surprise from the positive impact of the alleged misstatement, if any. On the remaining seven of the 17 allegedly inflationary earnings release dates, abnormal returns were not statistically significantly different from zero even though the earnings surprise on some of these days was substantial. So for each of these allegedly inflationary earnings release dates, Plaintiffs need to be able to disentangle any price impacts of

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<sup>94</sup> See Jones, Charles P., “Investments: Analysis and Management,” *Wiley*, 2012 (12<sup>th</sup> Edition), pp. 405–08. Earnings surprise is the difference between actual earnings and the market’s expectation of those earnings, where analysts’ consensus earnings forecasts typically proxy for the market’s expectation of earnings.

allegedly inflationary misrepresentations from various combinations of countervailing/counterintuitive *negative/nonexistent* abnormal returns and countervailing or amplifying earnings surprises, but Dr. Hartzmark has offered no methodology for doing so. It is unclear how, if at all, Plaintiffs would be able to use this information to accurately construct a series of inflation ribbons that would logically correspond to their alleged misstatements, including needed parsing and scaling.

71. With respect to revenues (of which Plaintiffs' allegations appear to focus on a small subset of, *i.e.*, Consumer Strategic revenue), six of the 17 allegedly inflationary earnings releases during the Class Period had *negative* revenue surprises. That is, the actual revenue announced that day was lower than what the market was expecting. Of these, *three had statistically significant negative abnormal returns* and three were not statistically significantly different from zero. Eleven of the 17 allegedly inflationary earnings releases had positive revenue surprises; of these, *only three had statistically significant positive abnormal returns*, while *four had statistically significant negative abnormal returns* and four had no statistically significant abnormal returns.

## 2. Disclosure Dates with Statistically Significant Positive Abnormal Returns

72. Among all 52 days on which the alleged misrepresentations potentially could have impacted CenturyLink's stock price, *only four* have statistically significant positive abnormal returns. Three out of four of these positive abnormal return dates corresponded to earnings releases on which the EPS and revenue surprises were positive (May 8, 2014; November 15, 2015; and February 11, 2016). The only other positive, statistically significant abnormal return during the Class Period (December 7, 2015) was a day on which the allegedly inflationary

misrepresentations were made at a conference, as described below. Given that these information-rich days included a number of positive disclosures, it is likely impossible to reliably isolate the effects of the allegedly inflationary misrepresentations from other “confounding” good news on those days, and Dr. Hartzmark has certainly not put forward a model capable of doing so, or even discussed such a model. The complexity and challenge can be illustrated by doing even a preliminary review of each of these four dates.

73. The first statistically significant price increase was on **May 8, 2014** following the release of CenturyLink’s Q1 2014 10-Q. CenturyLink reported large additions of both Prism TV and broadband high-speed internet subscribers. Plaintiffs provide no evidence that these increases were driven, partially or wholly, if at all, by CenturyLink’s misleading sales practices. In addition, there were other positive factors reported that could also have driven the price increase. For instance, CenturyLink’s stock buyback had progressed at a rapid rate. Analysts at Macquarie stated that, “we believe that CTL, as the most liquid wireline stock, will benefit from a scarcity premium on the emerging high-bandwidth theme.”<sup>95</sup>

74. The second statistically significant price increase was on **November 5, 2015**, when CenturyLink’s Q3 10-Q was released. This filing included a number of positive disclosures that analysts and the market would likely have viewed favorably. Free cash flows were strong, beating some analyst estimates by more than \$100 million.<sup>96</sup> Management was on track to reduce operating expenses by \$125 million for the year, and aggressive stock buybacks were exceeding

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<sup>95</sup> “CenturyLink Riding high-bandwidth wave; maintain OP and raise estimates and TP to \$39,” *Macquarie*, May 8, 2014, p. 1.

<sup>96</sup> “CTL: Solid Q3 Results, Exploring Options For Data Center,” *Wells Fargo*, November 5, 2015, p. 1.

analyst expectations.<sup>97</sup> CenturyLink's biggest news, however, was that they had "retained financial advisors to assist in the exploration of strategic alternatives for our data centers and colocation business operations."<sup>98</sup> These strategic alternatives included the potential sale of the data centers, which analysts at Wells Fargo, Morgan Stanley, and Macquarie all viewed very favorably.<sup>99</sup> It is challenging to believe that the revenue-related allegedly misleading disclosures made by CenturyLink on this date would have registered with investors or have had any impact on CenturyLink's stock price in the midst of such significant positive news.

75. The third statistically significant price increase was on **December 7, 2015**, the day UBS Research held a Communications Conference at which CenturyLink's CFO Stewart Ewing discussed CenturyLink's continued business strategy. UBS's Batya Levi questioned Ewing on several topics including data center and co-location sales, headwinds facing the high-bandwidth strategic segment, concerns about wholesale-side revenue losses, and continued sales slowdown from salesforce re-alignment. After the conference, Ms. Levi released an analyst report highlighting several topics discussed. She noted "continued progress on sales force trends;" anticipated "stabilizing top line trends" attributable to a combination of acceleration in high bandwidth service to business customers; GPON [Gigabit Passive Optical Networks] and CAFII [Connect America Fund II, an FCC program designed to expand access to voice and broadband services for areas where they are unavailable] investments to facilitate broadband on the

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<sup>97</sup> "CenturyLink, Inc. 3Q15 Review: Results Light, Data Center Monetization in Focus," *Morgan Stanley*, November 5, 2015, p. 1.

<sup>98</sup> CenturyLink 10-Q (2015 3Q), p. 43.

<sup>99</sup> "CenturyLink Several N\_T catalysts; Board appears to finally be open to unlocking value," *Macquarie*, November 8, 2015, p. 1.



consumer side; Company hopes for positive broadband net adds, though UBS was still predicting -40,000 on this front; and anticipated favorable tax changes.<sup>100</sup>

76. The last date on which I found a statistically significant positive abnormal return was **February 11, 2016**. While it is true CenturyLink's 4Q 2015 earnings release mentioned growth in the consumer segment and additional Prism TV subscribers, the earnings release also mentioned a number of other pieces of information that would likely have had a positive impact on CenturyLink's share price. These include: completion of a \$1 billion share repurchase program, with \$280 million in 4Q 2015, up from \$263 million in 3Q 2015; "increased business customer demand for high-bandwidth data services;" and "increased high-cost support revenues due to recognition of CAF Phase 2 funds."<sup>101</sup> Analysts from investment banks reporting on CenturyLink, including Morgan Stanley, J.P. Morgan, and Jefferies, were all in agreement that CenturyLink's income beat was driven by strategic business revenue.<sup>102</sup> Morgan Stanley analysts, for example, said "the revenue beat relative to MSe was driven by better strategic business revenue (+40m) and legacy consumer revenue (+\$15m)."<sup>103</sup> A J.P. Morgan report headline read "Consumer revenue weaker as solid business revenue lifted the beat; EBITDA margin higher than anticipated due to cost discipline."<sup>104</sup> In addition to echoing the points in the earnings release, analysts from Bank of America Merrill Lynch, J.P. Morgan, and Jefferies

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<sup>100</sup> "CTL: Highlights from UBS Conference," *UBS*, December 7, 2015, p. 1.

<sup>101</sup> "CenturyLink, Inc. 4Q15 Review: Results Better Than Feared, Data Center Commentary Positive," *Morgan Stanley*, February 11, 2016, pp. 1, 2.

<sup>102</sup> "CenturyLink, Inc. 4Q15 Review: Results Better Than Feared, Data Center Commentary Positive," *Morgan Stanley*, February 11, 2016, pp. 1, 2; "CenturyLink Strong 4Q15 Numbers and Reassuring 2016 Guide, No Update on Data Center Sale," *J.P. Morgan*, February 11, 2016, p. 1; "CenturyLink Cost Cuts Show Through; Guidance Suggests Little Upside to Estimates," *Jefferies*, February 11, 2016, p. 1.

<sup>103</sup> "CenturyLink, Inc. 4Q15 Review: Results Better Than Feared, Data Center Commentary Positive," *Morgan Stanley*, February 11, 2016, pp. 1, 2.

<sup>104</sup> "CenturyLink: Strong 4Q15 Numbers and Reassuring 2016 Guide, No Update on Data Center Sale," *J.P. Morgan*, February 11, 2016, p. 1.

mentioned that CenturyLink was expecting to begin negotiations for its data center sale in the coming weeks.<sup>105</sup>

### 3. *Disclosure Dates with Statistically Significant Negative Abnormal Returns*

77. Among all 52 days on which the alleged misrepresentations potentially impacted CenturyLink's stock price, eight have statistically significant *negative* abnormal returns. All eight followed earnings releases; two of them, November 7, 2013 and November 8, 2013, followed the same earnings release. On five of these dates (August 8, 2013; November 7, 2013; November 8, 2013; November 6, 2014; and October 31, 2016) the earnings releases contained *positive* earnings per share and revenue "surprises," which strongly suggests that other factors were driving the change in the abnormal returns. Two dates (February 12, 2015 and May 4, 2017) had *negative* earnings per share and revenue "surprises," and the last date (May 5, 2016) had a *positive and negative* earnings per share and revenue "surprise" respectively. The variation in the relationship between the abnormal returns and the "surprises" demonstrates how important the full picture of the many pieces of information released on any given day is in determining the abnormal returns. Factors which seem very important in one release can be meaningless in another release depending on the other pieces of information which accompany it. Just like the days with positive abnormal returns, given that these information-rich days included a number of both positive and negative disclosures, it is likely impossible to reliably isolate the effects of the allegedly inflationary misrepresentations from other "confounding" good and bad news on those days, and Dr. Hartzmark has certainly not put forward a model capable of doing so.

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<sup>105</sup> "CenturyLink: 4Q Wrap: Riding the storm out," Bank of America Merrill Lynch, February 11, 2016, p. 1; "CenturyLink: Strong 4Q15 Numbers and Reassuring 2016 Guide, No Update on Data Center Sale," *J.P. Morgan*, February 11, 2016, p. 1; "CenturyLink: Cost Cuts Show Through; Guidance Suggests Little Upside to Estimates," *Jefferies*, February 11, 2016, p. 1.

78. As another illustration of the complexity that must be considered, I can identify some of the common themes across these different dates that show broader concerns about the company's prospects. On the five dates in this group with positive earnings per share and revenue "surprises" analyst reports tended to focus on the risks of future plans and weaknesses in particularly important parts of the business. For example on August 8, 2013, Macquarie focused on the riskiness of the stock buyback program due to the increase in CenturyLink's leverage.<sup>106</sup> On November 7, 2013, Bank of America Merrill Lynch and J.P. Morgan both focused on the weakness in CenturyLink's data hosting business *in spite of* the more than offsetting strength of the consumer segment.<sup>107</sup> And on October 31, 2016 Macquarie emphasized that, despite the potential upside to the Level 3 acquisition, they saw, "the road to synergies...as a rocky one."<sup>108</sup>

#### 4. *Disclosure Dates with No Statistically Significant Abnormal Returns*

79. Among all 52 days on which the alleged misrepresentations potentially impacted CenturyLink's stock price, 40 had no statistically significant abnormal returns. Similar mixes of information as discussed above were released on many of these 40 days, including positive and negative earnings per share and revenue surprises, but there was no detectable impact on the abnormal returns. This shows again that it is likely impossible to reliably isolate the effects of the allegedly inflationary misrepresentations from other "confounding" good and bad news on these days, and Dr. Hartzmark has not put forward a model capable of doing so.

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<sup>106</sup> "CenturyLink 'Narrowed' guidance likely to pressure shares; leveraging up for buyback looks risky long term," *Macquarie*, August 8, 2013, p. 1.

<sup>107</sup> "CenturyLink 3Q Wrap: Consumer and Business outperforming," *Bank of America Merrill Lynch*, November 7, 2013, p. 1; "CenturyLink Strong Broadband Rebound Mired by Data Hosting Write Down Tempers Flat Revenue Expectations," *J.P. Morgan*, November 7, 2013, p. 1.

<sup>108</sup> "CenturyLink Double, Double Toil And..." *Macquarie*, October 31, 2016, p. 1.

80. Overall, the analyses above highlight the complexity of these 52 frequently information-rich dates and the overly simplistic—and incorrect—premise that merely assuming everything in the Complaint will be shown to be true will somehow result in a damages measurement approach that will be common to all class members.

**C. There is No Evidence That the Alleged Sales Practices Had a Material Impact on Revenue**

81. Another implicit assumption is that allegations of cramming, even if true and even if unexpected (both huge assumptions), would have a material impact on revenue. Again, Dr. Hartzmark has done no analysis to show the plausibility of this assumption or to estimate how this would relate to a determination of inflation for purposes of developing a common method.

82. In the previous section, I included my analysis of revenue “surprises” relative to expectations. In this section, I discuss other aspects of the allegations regarding revenue. With regards to revenue, Plaintiffs allege that:

*Defendants’ materially false and misleading statements misrepresented the true reasons behind the growth and fluctuations in the Company’s reported revenues, the Company’s prospects for future revenue growth, and its financial performance. When those statements were corrected and the risks concealed by them materialized ... investors suffered losses as the price of CenturyLink securities declined.*<sup>109</sup>

83. The Complaint lists the alleged revenue-related misstatements in Appendix A. These alleged misstatements largely focus on Consumer Strategic revenue. As explained below, this was a relatively small part of CenturyLink’s business and the timing of the revenue changes Plaintiffs point to as evidence of cramming-driven revenue do not line up with the facts of the

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<sup>109</sup> Complaint, ¶ 265.

case. Again, even if a complete loss causation analysis is not required at this stage, it is insufficient from an economic perspective to simply assume with no review and consideration as to the plausibility of the allegation or the impact on common methods of measurement that the Plaintiffs are 100 percent correct on all the allegations and their presumed consequences.

*1. CenturyLink's Operating Segments and Products and Services*

84. CenturyLink experienced substantial growth in annual revenues during the years 2011 and 2012, due to the acquisitions of Qwest on April 1, 2011, and Savvis on July 15, 2011.<sup>110</sup> The 2011 acquisitions resulted in a variety of important changes to CenturyLink's operations. One of these changes was providing service to a greater number of densely-populated markets. This is significant because higher population density tends to mean a wider range of choices available to consumers, and therefore more intense competition for the company.<sup>111</sup> Thereafter, CenturyLink reorganized its business and financial reporting segments several times, but experienced roughly flat to moderately declining operating revenues, with quarterly operating revenues declining roughly 10 percent over the Class Period. (See **Exhibit 3** and **Exhibits 4A - 4C.**)

85. Not surprisingly, given the economic challenges of the telecommunications business, CenturyLink underwent a series of reorganizations and changes in reporting during the past decade. For example, from its acquisitions of Qwest and Savvis in 2011 to January 3, 2013 (approximately two years), CenturyLink reorganized its business three times. In the last of these three reorganizations, just a few months prior to the beginning of the Class Period, the Company

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<sup>110</sup> CenturyLink 10-K (2012), p. 52.

<sup>111</sup> CenturyLink 10-K (2012), p. 4.

announced that, going forward, its consolidated financial statements would contain results for four operating segments: Consumer, Business, Wholesale, and Data Hosting.<sup>112</sup>

- “*Consumer*. Consists generally of providing strategic and legacy products and services to residential consumers. Our strategic products and services offered to these customers include our broadband, wireless and video services, including our Prism TV services. Our legacy services offered to these customers include local and long-distance service;
- *Business*. Consists generally of providing strategic and legacy products and services to commercial, enterprise, global and governmental customers. Our strategic products and services offered to these customers include our private line, broadband, Ethernet, MPLS, Voice over Internet Protocol (“VoIP”), and network management services. Our legacy services offered to these customers include local and long-distance service;
- *Wholesale*. Consists generally of providing strategic and legacy products and services to other communications providers. Our strategic products and services offered to these customers are mainly private line (including special access), dedicated internet access, digital subscriber line (“DSL”) and MPLS. Our legacy services offered to these customers include the resale of our services, the sale of unbundled network elements (“UNEs”) which allow our wholesale customers to use our network or a combination of our network and their own networks to provide voice and data services to their customers, long-distance and switched access services and other services, including billing and collection, pole rental, floor space and database services; and
- *Data Hosting*. Consists primarily of providing colocation, managed hosting and cloud hosting services to commercial, enterprise, global and governmental customers.”<sup>113</sup>

86. Effective November 1, 2014, the Company changed its organizational structure once again and began reporting results for only two operating segments: Business and Consumer.<sup>114</sup>

- “*Business*. Consists generally of providing strategic, legacy and data integration products and services to enterprise, wholesale and governmental customers, including other communication providers. Our strategic products and services offered to these customers include our private line (including special access), broadband, Ethernet, MPLS, Voice over Internet Protocol (“VoIP”), network

<sup>112</sup> CenturyLink 10-K (2012), pp. 6–7.

<sup>113</sup> CenturyLink 10-K (2013), pp. 5–6

<sup>114</sup> CenturyLink 10-K (2014), p. 4.

management services, colocation, managed hosting and cloud hosting services. Our legacy services offered to these customers primarily include switched access, long-distance, and local services, including the sale of unbundled network elements (“UNEs”) which allow our wholesale customers to use our network or a combination of our network and their own networks to provide voice and data services to their customers; and

- *Consumer*. Consists generally of providing strategic and legacy products and services to residential customers. Our strategic products and services offered to these customers include our broadband, wireless and video services, including our Prism TV services. Our legacy services offered to these customers include local and long-distance service.”<sup>115</sup>

87. In January 2017, the Business segment was renamed the Enterprise segment and the Company “reassigned [its] information technology, managed hosting, cloud hosting and hosting area network services from [its] business segment to a new non-reportable operating segment.”<sup>116</sup>

88. Through all but the last of these operating segment reorganizations, CenturyLink also categorized its product and service offering using a second framework: Strategic and Legacy.<sup>117</sup> In other words, reporting could either be done at the business segment level, the strategic/legacy level, or a combination of both.

- “We primarily focus our marketing and sales efforts on our ‘**strategic**’ services, which are those services for which demand remains strong and that we believe are most important to our future performance. Generally speaking, our strategic services enable our customers to access the Internet, connect to private networks and transmit and store data, and enhance the security, reliability and efficiency of our customers’ communications and data storage. Our strategic services are comprised of the following: Broadband ... Private Line ... MPLS. Multi-Protocol Label Switching [a data technology supporting live voice and video that enables network operators to reroute traffic] ... Managed Hosting ... Colocation ...

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<sup>115</sup> CenturyLink 10-K (2014), pp. 4–5.

<sup>116</sup> CenturyLink 10-K (2017), p. 6.

<sup>117</sup> See CenturyLink 10-K (2013), pp. 6–8; CenturyLink 10-K (2014), pp. 5–6; CenturyLink 10-K (2015), pp. 5–7; CenturyLink 10-K (2016), pp. 7–8.

Ethernet ... Video [Prism TV and DIRECTV]... VoIP ... and Managed Services [network, hosting, cloud, and IT services].”<sup>118</sup>

- “Our **‘legacy’** services represent our traditional voice, data and network services, which include the following: Local Voice Service ... Long-distance Voice Service ... integrated services digital network (‘ISDN’) services, which uses regular telephone lines to support voice, video and data applications ... wide area network (‘WAN’) services ... and ... various forms of switched access services to wireline and wireless service providers for the use of our facilities to originate and terminate their interstate and intrastate voice transmissions.”<sup>119</sup>

89. As with the business segments, CenturyLink reclassified certain revenue streams from Strategic to Legacy services, and vice versa, multiple times during the Class Period. For example, in 2013, CenturyLink reclassified operating revenues attributable to certain bundled services from Legacy to Strategic services.<sup>120</sup> Similarly, operating revenues attributable to certain Competitive Local Exchange Carrier (CLEC) services were moved from Strategic to Legacy services.<sup>121</sup>

90. In addition, during the first quarter of 2015, CenturyLink reclassified revenue from certain products and services associated with its acquisition of Savvis from Strategic to Legacy services.<sup>122</sup> Finally, during the second quarter of 2016, CenturyLink moved revenue from certain business low-bandwidth data services, including its private line services, from Strategic to Legacy services.<sup>123</sup>

91. Understanding the number and timing of reorganizations and changes in reporting and the multiple dimensions on which reporting was done is important in assessing how, if at all,

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<sup>118</sup> CenturyLink 10-K (2014), pp. 5–6.

<sup>119</sup> CenturyLink 10-K (2014), pp. 5–6.

<sup>120</sup> CenturyLink 10-K (2013), p. 44.

<sup>121</sup> CenturyLink 10-K (2013), p. 45.

<sup>122</sup> CenturyLink 10-K (2015), p. 45.

<sup>123</sup> CenturyLink 10-K (2016), p. 123.



the allegations in this Action would manifest themselves in CenturyLink's financial reporting, how any such manifestations would affect revenue trends over time as tracked and interpreted by investors, and the degree to which any alleged revenue reporting would be noticed or change investor expectations. While Dr. Hartzmark has provided no such analysis, I discuss some relevant high-level trends and their implications below to illustrate the challenges in developing a common damages calculation approach.

## 2. *Trends in Strategic Consumer Segment Revenue*

92. Throughout the Class Period, Consumer segment revenues remained relatively flat and accounted for roughly one third of CenturyLink's total revenues. (See **Exhibit 4C.**) Throughout the Class Period, Strategic services revenue accounted for between approximately 45 to 55 percent of CenturyLink's total revenues; and shifting allocations of revenue between these two product service categories over the Class Period make reliable characterization of trends along these lines difficult.<sup>124</sup> (See **Exhibit 4A.**) Again, Dr. Hartzmark has provided no analysis of how investors would evaluate the alleged inflationary statements, how they would translate those into expectations regarding CenturyLink's financial reporting, or the degree to which they would have created inflation in the stock price at any given point.

93. As a primary point, it is important to note that the consumer-facing portion of the business was relatively small and declining. Again, Dr. Hartzmark has done nothing to evaluate any inflationary statements or to evaluate if any alleged misstatements regarding these portions of the business would be significant enough to have a material impact on the CenturyLink stock

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<sup>124</sup> See for example "CenturyLink (CTL): Model Update and Thesis Summary," *Bernstein*, December 4, 2014, p. 2; "CenturyLink 4Q14 Results: Four Takeaways," *Bernstein*, February 12, 2015, p. 1; "Weakish Quarter; Tweaking Down EBITDA Estimate," *Oppenheimer*, February 12, 2015, p. 1.

price. Indeed, Consumer Strategic service revenue—an intersection between these operating and product/service segments that Plaintiffs focus on in their Complaint<sup>125</sup>—was under 20 percent of the Company’s total revenue throughout the Class Period. (See **Exhibit 4B**.) As analysts noted, with the pending acquisition of Level 3 at the time of the allegedly curative disclosures, the Consumer segment would shrink from roughly one third of CenturyLink’s total revenue to roughly 25 percent or less of the combined entity’s revenue,<sup>126</sup> presumably leading to a roughly proportionate reduction in Consumer Strategic revenue to the post-merger entity as well.

### 3. *Analysis of Plaintiffs’ Alleged “Low Cramming” Period*

94. While Dr. Hartzmark has done no analysis himself, the Complaint—which he has assumed to be accurate—alleges that CenturyLink experienced revenue and other impacts when it temporarily moved away from the cramming-focused sales model before once again returning to a cramming-focused sales model. In particular, the Complaint alleges that CenturyLink implemented “a new behavioral coaching model for its sales employees” “as an attempt to lower the number of cramming incidents” around April 2014.<sup>127</sup> Plaintiffs’ witnesses allege that after experiencing a decline in sales, “the Company’s senior management reverted back to the old metrics system almost immediately,” causing revenues to grow.<sup>128</sup> The Complaint alleges that shortly after June 2, 2015, “CenturyLink’s return to the metrics-based system and strict enforcement of sales quotas began to take hold.”<sup>129</sup> In other words, the Complaint appears to

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<sup>125</sup> See Complaint, Appendix A.

<sup>126</sup> See, for example, “CenturyLink Accused in Lawsuit of Signing Up Customers to Services They Didn’t Request,” *Morningstar*, June 16, 2017, p. 1; “The Roz Report: A Risk Framework for Recent CenturyLink Allegations,” *Barclays*, June 26, 2017, p. 1.

<sup>127</sup> Complaint, ¶¶ 109–14.

<sup>128</sup> Complaint, ¶¶ 112, 117.

<sup>129</sup> Complaint, ¶¶ 116–17.

suggest that CenturyLink moved away from a “cramming-focused model” to a “low cramming model” for approximately a year in the spring of 2014 to the spring of 2015, but that it reverted to the “cramming-focused model” after this period.

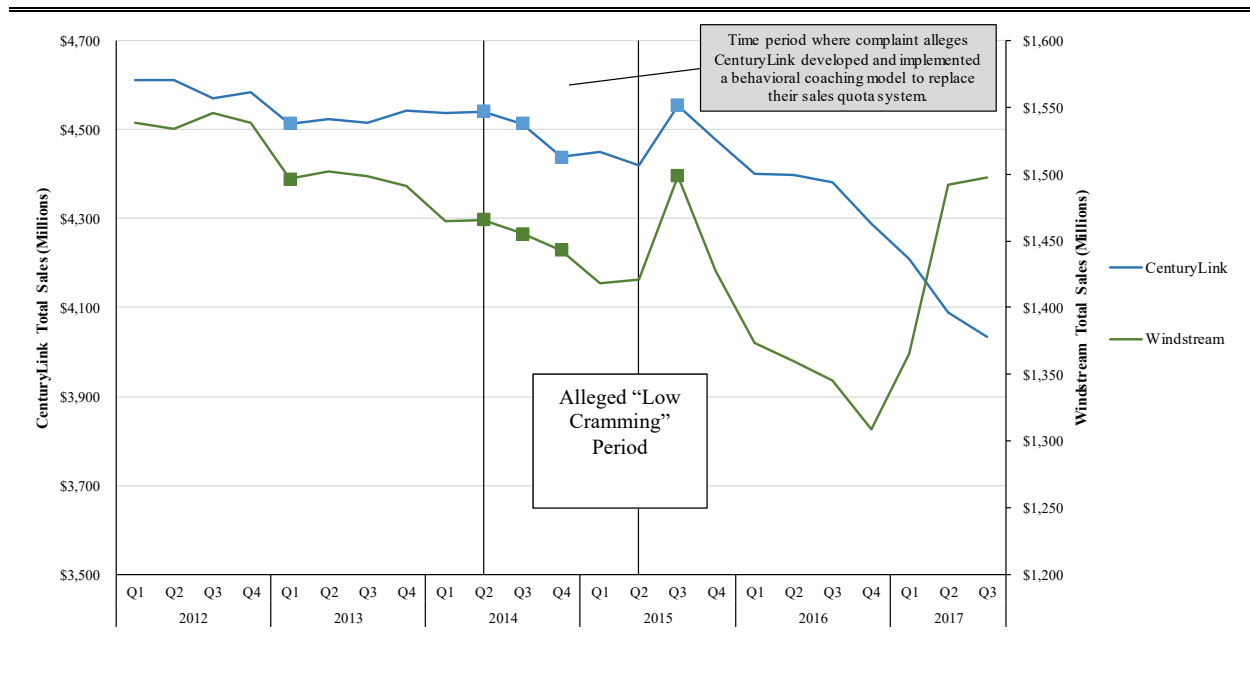
*a. Analysis of Revenue Trends Compared to Close Peer (Windstream)*

95. CenturyLink’s revenue trends around the low cramming period are cited in the Complaint as supporting evidence of misconduct during the Class Period. While CenturyLink’s revenue did decline during the alleged “low cramming” period (between 2Q 2014 and 2Q 2015) and rise thereafter (beginning in 3Q 2015), the figure below shows that a close peer, Windstream (presumably with a sales model that was not identical in form or timing to CenturyLink’s), experienced similar movements in its revenue over this same period.<sup>130</sup> A review of both companies’ earnings releases for the relevant quarters (indicated with markers on the lines in **Figure 6**) reveals that these co-movements were at least partially the result of similar market forces and business strategies impacting both companies, and thus would have been observed at CenturyLink at least to some extent in the absence of any alleged cramming related sales practices.

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<sup>130</sup> As shown in **Exhibit 28**, Windstream is commonly cited in analyst reports and other sources as a peer/competitor to CenturyLink. Analyst commentary over the Class Period also regularly cited the two companies as close peers and compared and contrasted their performance and reasons for similarities and differences. (See **Exhibit 19C**.)

**Figure 6**  
**Quarterly Sales of CenturyLink vs. Windstream**



96. In **Exhibit 19B**, I list quotes from CenturyLink’s and Windstream’s earnings releases, 10-Ks, and 10-Qs for a number of quarters where the two firms displayed similar movements in revenue (indicated with markers on the lines in the figure above) and show common explanations for each. Below is a brief synopsis of similar explanations given by the two companies for the two quarters of clear decline within the alleged low cramming period, 3Q 2014 and 4Q 2014, and for the quarter of sharp growth that occurred directly after the alleged low cramming period ended, 3Q 2015.

- 3Q 2014:** Both firms experienced a decline in revenue and both cited revenue losses associated with voice services due to competition and product substitution to new technologies at other companies; wholesale losses due to switched access rate reductions coming from the Connect America and Inter-carrier Compensation Reform order; and the need to attract more broadband subscribers to remain competitive in the telecommunications landscape.

### Consumer Services

- *CenturyLink*: Consumer: “Intense competition and product substitution continue to drive our **access line losses**. For example, many **consumers are substituting cable and wireless voice services and electronic mail, texting and social networking non-voice services for traditional voice telecommunications services**. We expect that these factors will continue to negatively impact our business,” ... “The decline in legacy services revenues for both periods was primarily due to declines in local and long-distance service volumes associated with access line losses resulting from the competitive and technological changes described above.”<sup>131</sup>
- *Windstream*: Consumer: “**Voice and switched access revenues will continue to be adversely impacted by future declines in voice lines due to competition from cable companies**, wireless carriers and providers using other emerging technologies,” ... “Decreases in voice service revenues were primarily attributable to the decline in voice lines...”<sup>132</sup>

#### **Wholesale Services**

- *CenturyLink*: Wholesale: “Our **switched access revenues** have been and will continue to **be impacted by changes related to the Connect America and Intercarrier Compensation Reform order (“CAF order”)** adopted by the Federal Communications Commission (“FCC”) on October 27, 2011, which we believe has increased the pace of reductions in the amount of switched access revenues we receive in our wholesale segment.”<sup>133</sup>
- *Windstream*: Wholesale: “Revenues from these services are expected to decline due to voice line losses and continued reductions in switched access rates,” ... “Decreases in **switched access revenues were primarily due to the impact of intercarrier compensation reform** and a continued decline in network demand.”<sup>134</sup>

#### **Broadband**

- *CenturyLink*: “In order to remain competitive and attract additional **residential broadband** subscribers, we believe it is important to continually increase our broadband network's scope and connection speeds.”<sup>135</sup>

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<sup>131</sup> CenturyLink 10-Q (2014 3Q), pp. 30, 31.

<sup>132</sup> Windstream 10-Q (2014 3Q), pp. 49, 53.

<sup>133</sup> CenturyLink 10-Q (2014 3Q), p. 34.

<sup>134</sup> Windstream 10-Q (2014 3Q), p. 53.

<sup>135</sup> CenturyLink 10-Q (2014 3Q), p. 30.

- *Windstream*: “We continue to transition revenue streams away from traditional consumer voice services to our strategic growth areas of business services and **consumer broadband**...”<sup>136</sup>
- **4Q 2014**: Both firms experienced a decline in revenue and both cited continued legacy telephone line losses.
  - *CenturyLink*: “**Consumer segment revenues decreased** by \$10 million, or less than 1%, for year ended December 31, 2014 as compared to the year ended December 31, 2013 and decreased by \$160 million, or 3%, for the year ended December 31, 2013 as compared to the year ended December 31, 2012. ... **The decline in legacy services revenues for both periods was primarily due to declines in local and long-distance service volumes associated with access line losses** ...”<sup>137</sup>
  - *Windstream*: “For the year ended December 31, 2014, **consumer voice lines decreased** by approximately 107,700, or 6.3 percent compared to 119,600, or 6.5 percent during 2013,” ... “**Decreases in voice service revenues were primarily attributable to declines in voice lines.**”<sup>138</sup>
- **3Q 2015**: Both firms experienced an increase in revenue and both cited acceptance of Connect America Fund Phase 2 support; and increased sales revenue from newer technologies including high-bandwidth and Ethernet.

#### **CAFII Payments**

- *CenturyLink*: “Our total operating revenues increased by \$40 million, or 1%, for the three months ended September 30, 2015 as compared to the three months ended September 30, 2014. The increase in total operating revenues was primarily due to the **additional revenue of \$158 million recorded in the third quarter of 2015 under the FCC's CAF Phase 2 high-cost support (“CAF Phase 2 Support”) program**” ... “The increase in other operating revenues was primarily due to additional revenue recorded under the CAF Phase 2 Support program and higher revenues related to an increased universal service fund contribution factor during the first seven months of 2015.”<sup>139</sup>
- *Windstream*: “Operating results for the three and nine month periods ended September 30, 2015 were favorably impacted by **additional subsidy revenues received from the Connect America Fund (“CAF”) Phase II**, growth in enterprise revenues, reflecting increased demand for integrated data and voice services, multi-site networking and data center services” ... “Federal USF and CAF revenues primarily consists of frozen USF support, CAF Phase II support and ARM. The increases in the three

<sup>136</sup> Windstream 10-Q (2014 3Q), p. 47.

<sup>137</sup> CenturyLink 10-K (2014 4Q), p. 53.

<sup>138</sup> Windstream 10-K (2014 4Q), p. F-7, F-8.

<sup>139</sup> CenturyLink 10-Q (2015 3Q), p. 27.

and nine month periods ended September 30, 2015 are mostly attributable to the CAF Phase II incremental support of \$72.8 million received during the third quarter of 2015, which was retroactive to January 1, 2015.”<sup>140</sup>

### **High-Bandwidth**

- *CenturyLink*: “Revenue from **high-bandwidth data services** provided to Business customers, including MPLS, **Ethernet** and Wavelength, grew more than 7% year-over-year; Revenue from Consumer strategic services also grew more than 7% year-over-year.”<sup>141</sup>
- *Windstream*: “Consumer service revenue was up on a sequential basis with continued growth in high-speed Internet bundled revenue.” ... “Carrier service revenues were \$169 million, aided by growth in new **high-bandwidth WAVE sales** and wireless **Ethernet**.”<sup>142</sup>

97. Even without a full analysis of loss causation, it is obvious from a review of the data that other, external, factors are involved in the observed revenue pattern around the period of the alleged low cramming sales model. As with the other analyses I have presented, this calls into question both the accuracy of the Complaint and the lack of any economic analysis showing whether or how a common method could be developed to accurately measure inflation and damages.

### *b. Analysis of Consumer Complaints*

98. Plaintiffs further discuss the alleged low cramming period by stating that, “[a]fter CenturyLink returned to its prior sales model, billing complaints again began piling up, leading consumers to lodge complaints with their state attorneys general.”<sup>143</sup> However, analysis of the FCC’s Consumer Complaints Data<sup>144</sup> indicates that CenturyLink’s billing and cramming

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<sup>140</sup> Windstream 10-Q (2015 3Q), p. 48, 53.

<sup>141</sup> CenturyLink Earnings Release (2015 3Q), p.1.

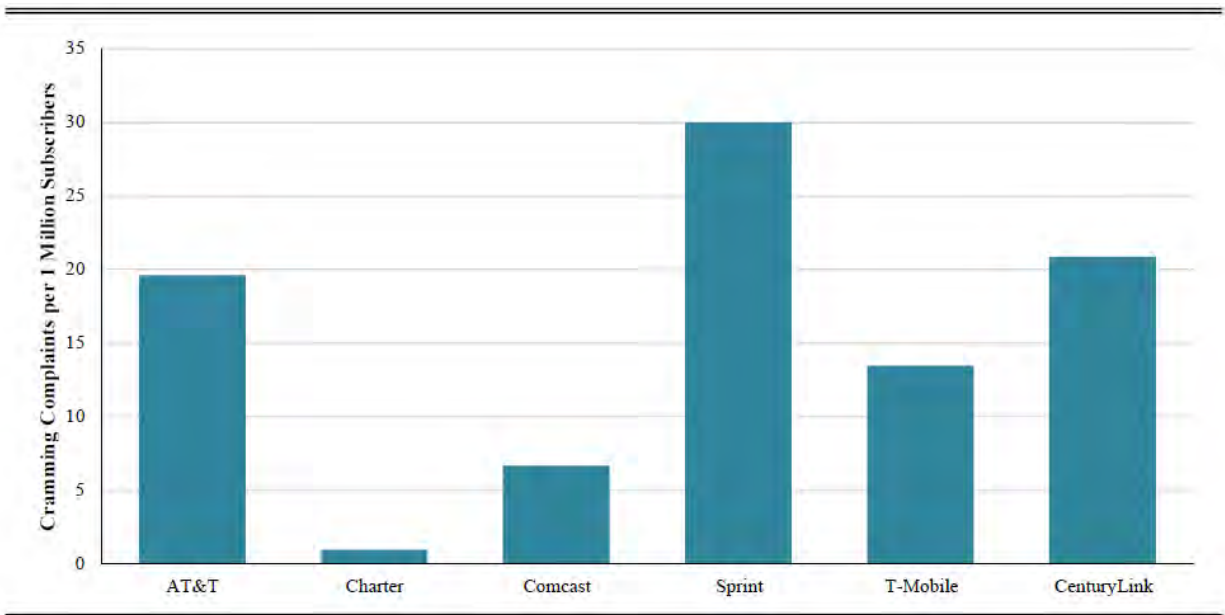
<sup>142</sup> Windstream Earnings Release (2015 3Q), p. 1.

<sup>143</sup> Complaint, ¶ 131.

<sup>144</sup> Available via Freedom of Information Act request.

complaints are within the range of peer companies (*see Exhibit 20B - 20D*). In **Figure 7** below (also shown as **Exhibit 20C**), one can see that CenturyLink has a cramming complaint rate (per million subscribers) that is lower than Sprint, higher than others, and relatively similar to AT&T.

**Figure 7**  
**Total FCC Cramming Complaints per 1 Million Subscribers**  
**October 2014 - June 2018**

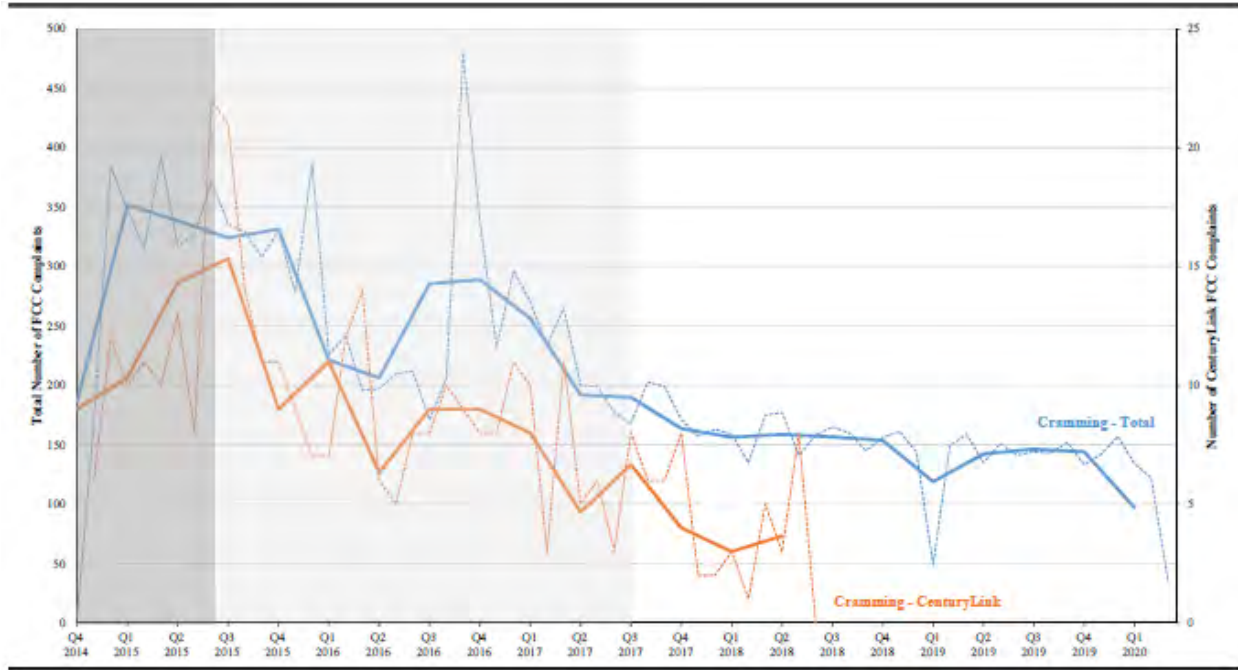


99. Similarly, CenturyLink's trends for both cramming and overall billing complaints follow the trends of the broader telecom industry (*see Exhibit 21 and Exhibit 22*).<sup>145</sup> **Figure 8** below shows the cramming-related complaints and **Figure 9** shows the overall billing-related complaints.

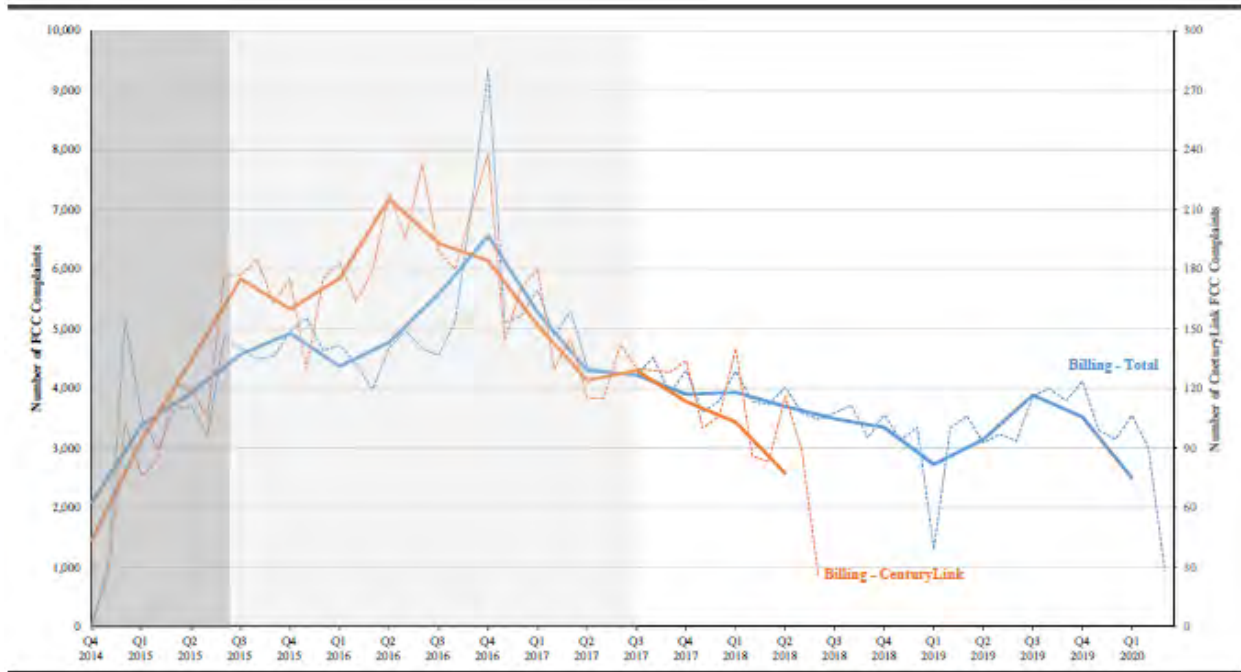
<sup>145</sup> FCC Consumer Complaints data is available from October 31, 2014 to present-day. CenturyLink-related FCC complaints data is from October 31, 2014 to June 2018.



**Figure 8**  
**Total FCC Industry and CenturyLink Cramming Complaints**  
**By Month (thin line) and Average During the Quarter (thick line)**  
**Q1 2015 - Q1 2020**



**Figure 9**  
**Total FCC Industry and CenturyLink Billing Complaints**  
**By Month (thin line) and Average During the Quarter (thick line)**  
**Q1 2015 - Q1 2020**



100. Overall, the number of CenturyLink-related complaints received by the FCC is a small fraction of the total number of cramming and billing complaints received by the FCC, even though it is amongst one of the largest telecommunications companies in the industry. In absolute terms, there were never more than 25 cramming complaints in a given month and never more than 250 billing complaints in a given month against CenturyLink between October 2014 and June 2018.

101. Plaintiffs selectively use the same FCC complaints data to allege that “customer complaints and consumer segment revenues tracked the Company’s efforts to address the widespread deceptive billing practices at the Company.”<sup>146</sup> Plaintiffs’ accompanying chart in the

<sup>146</sup> Complaint, ¶ 120.

Complaint is misleading, as it heavily censors the vertical axis and condenses the horizontal axis to show trends over a very narrow window where the trends comport with their desired tracking.

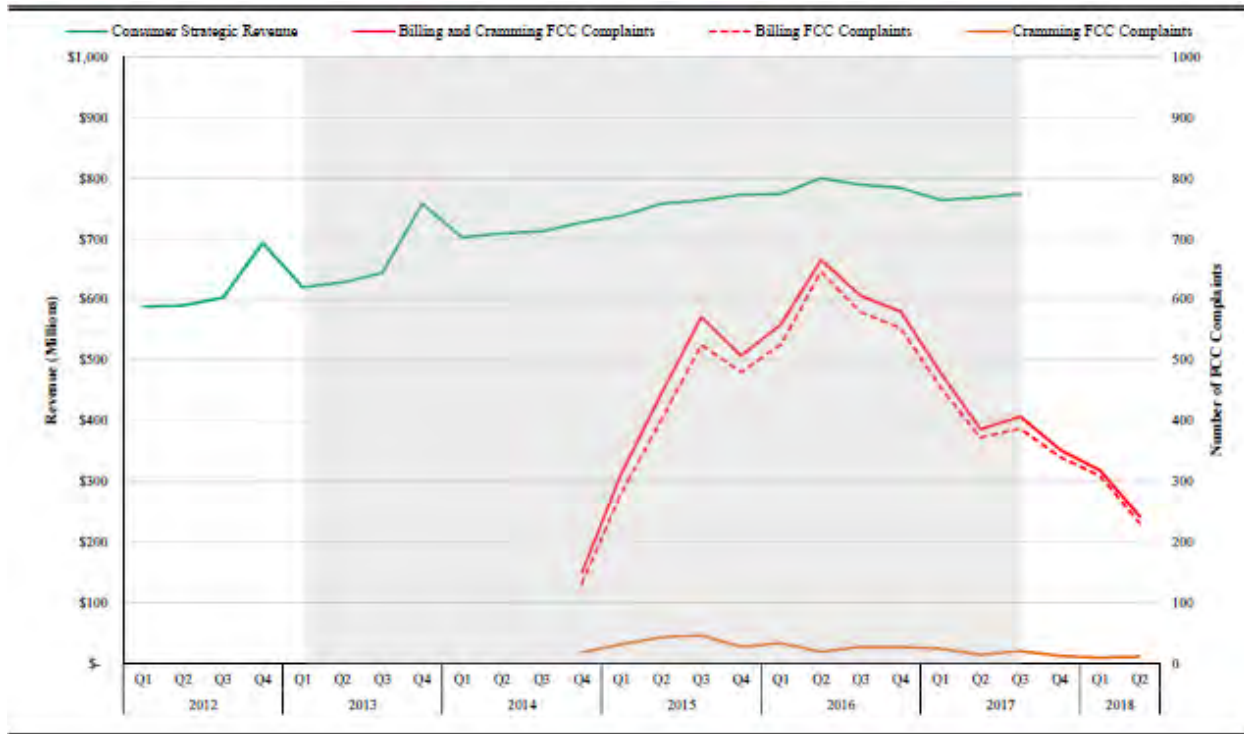
I reproduce this chart from the Complaint in the figure below.

**Figure 10**  
**Complaint Figure Showing “Consumer Strategic Revenue” and**  
**FCC Cramming and Billing Complaints**



102. I present the unmodified data showing both Consumer Strategic revenue and consumer complaints (billing-related, cramming-related, and combined) intersecting the x-axis at zero and with a longer time period below in **Figure 11** below (also **Exhibit 23**.)

**Figure 11**  
**CenturyLink Consumer Strategic Revenue and**  
**Total FCC Billing and Cramming Complaints by Quarter**  
**Q1 2012 - Q2 2018**



103. This chart shows that Consumer Strategic revenue was steadily increasing from Q1 2014 to Q2 2016, a period that includes the interval where Plaintiffs allege CenturyLink changed its sales practices to implement a behavioral coaching model that supposedly limited cramming. For the two-quarter portion of this approximately year-long “low cramming” period for which FCC complaints data is available (Q4 2014 to Q1 2015), the graph shows the number of complaints rising, even as the Company ostensibly took steps to allegedly limit deceptive billing practices (*see Exhibit 23 and Figure 11 above.*) This graph also shows that cramming-specific complaints were very low, and even declining, during the Class Period. In addition, the prior figures and discussion show that CenturyLink’s complaint patterns were very similar to the overall industry over this time period. Overall, this analysis illustrates the difficulty of

identifying a common damages method from Plaintiffs' Complaint, an exercise which Dr. Hartzmark has simply assumed away.

104. Additionally, Plaintiffs also conflate "Consumer **segment** revenues" with "Consumer **Strategic** revenue" in their chart and accompanying narrative in the Complaint. While the text of the Complaint narrative states that "customer complaints and **consumer segment** revenues tracked the Company's efforts to address the widespread deceptive billing practices at the Company," [emphasis added] but the chart actually shows trends in Consumer Strategic revenue.<sup>147</sup> As I have explained above, Consumer Strategic Revenue is a more granular revenue metric that is only one part of total Consumer segment revenue (the other part being Consumer Legacy revenue) and thus not fully representative of the consumer segment. Further, due to the changing definitions of CenturyLink's reporting segments, some revenue streams were periodically reclassified from Consumer Strategic to Consumer Legacy Services and vice versa and it is difficult to determine whether FCC complaints actually tracked the Consumer Strategic revenue. Finally, as shown earlier, CenturyLink's FCC complaint trends were similar to industry trends. It is not surprising that, given the heightened awareness of the Wells Fargo allegations, the number of complaints against both CenturyLink and the industry in total were increasing during 2015 and 2016.

## V. ECONOMIC FRAMEWORK: FOCUS ON ALLEGEDLY CORRECTIVE STATEMENTS

105. As discussed, Dr. Hartzmark did not provide any analysis associated with the economic framework in this Action. Rather, he simply assumed that all of Plaintiffs' allegations

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<sup>147</sup> Complaint, ¶ 120.

in the Complaint were accurate and that somehow they can all be translated into a common inflation ribbon or set of ribbons. With regards to the allegedly corrective disclosures, he simply conducts an event study to show that, using his model, the abnormal returns are statistically significant and negative on each of those dates. In a later section, I discuss more technical problems with his event study. In this section, I focus on the underlying premise that these dates should be assumed to be corrective disclosures and the price drops are measures of the impact of the revelation of the truth. Even without a full loss causation analysis, I show that there is no solid economic basis for Dr. Hartzmark's assumption that these represent corrective disclosures, and thus no economic basis to assume these can be readily used to develop a common method of accurately calculating damages.

106. As I have discussed earlier, in a “classic” securities fraud case, there is a fraud that begins at one or more dates (*e.g.*, “we landed a new contract”), which then causes the stock price to increase as investors and professionals anticipate future cash flows. At some point the fraud is revealed (*e.g.*, “we actually did not land that new contract”), which causes the stock price to decline. As discussed above, the economic framework in this case is different, more complex, and does not fit neatly into the “classic” securities fraud case where common methods of damages calculation are often developed.

107. In particular, the three alleged corrective disclosures in this Action are *not* disclosures of factual admissions by the Company and are *not* restatements of previously-reported financial results, as is typically true in a “classic” securities fraud matter. Instead, they are simply reporting about new lawsuits and investigations containing allegations, with no analysis of the substance of the allegations or whether, in fact, it turned out the lawsuits and investigations *actually did* reveal the types of massive fraud alleged by the Plaintiffs.

108. Furthermore, it is important to remember that the overall environment for consumer-facing financial and technology companies was very sensitive during this period due to the highly publicized concerns about Wells Fargo and its alleged practice of opening unauthorized accounts and selling unauthorized services. This context is important to consider in this Action when evaluating the economic framework around the alleged curative disclosures, which are essentially the reporting of allegations (occurring during a period of Wells Fargo-related FUD) contained within filed litigation, but are not proven facts.

109. For example, the first allegedly curative disclosure is the reporting of a former employee's lawsuit *alleging* a "Wells Fargo-type" fraud, which is clearly *not* the revelation of an *actual* large fraud at CenturyLink. In the case of Wells Fargo, for example, its first disclosure concerned an announcement that it had been fined \$185 million and had terminated 5,300 employees as a result of its sales practices concerns.<sup>148</sup> With investors on edge due to publicity around the Wells Fargo disclosure, it is unsurprising that there may have been some stock price reaction to allegations of similar practices at CenturyLink, as investors would have been concerned that CenturyLink *might* have had similar problems on a scale larger than the cramming and other allegations that were well known to investors in consumer-facing companies like CenturyLink.

110. However, allegations are not the same as actual facts, and lawsuits and investigations with claims or allegations that are not proven or do not result in accounting restatements, large layoffs, or other verified significant action should not be considered economic "fraud." Indeed, if a stock price moves simply due to uncertainty, it is important to

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<sup>148</sup> "Timeline of the Wells Fargo Accounts Scandal," *abcNEWS*, November 3, 2016. Available at: <<https://abcnews.go.com/Business/timeline-wells-fargo-accounts-scandal/story?id=42231128>>.



recognize that the stock price movement itself is *never* the measure of the truth. It is either an *underestimate*, if the truth turns out to confirm the allegations and thus the probability of a fraud on the scale alleged turns out to be 100 percent rather than an initial uncertain estimate by investors. Alternatively, it may turn out to be an *overestimate*, where the truth turns out to not support the allegations and the probability of a fraud, at least on the scale alleged, turns out to be effectively zero percent. Neither Plaintiffs' Complaint, nor Dr. Hartzmark, have shown how a common model of damages can deal with this FUD-related uncertainty that may be causing CenturyLink stock price movements.

111. In the context of such uncertainty, it is helpful to consider the commentary of finance professionals such as equity analysts following CenturyLink. In the next section, I evaluate the extent to which finance professionals evaluated the news on the relevant dates.

**A. Analysts' Reactions to the Allegedly Curative Disclosures on June 16 - June 19, 2017**

112. One method of evaluating the reasonableness of the assumption that each of the three dates are true corrective disclosures is to examine the commentary and professional output of sell-side analysts. Sell-side analysts serve both as a proxy for informed investors and as the information intermediaries that parse and convey information to the investing public. For companies that they follow, sell-side analysts periodically issue investment recommendations (*e.g.*, Buy/Sell/Hold), price targets as of future dates, estimates of future revenues and earnings, and other similar information. An examination of changes in some of these metrics can be informative about the extent to which professionals following specific companies consider new information economically relevant. This, in turn, informs a presumption of a common method for calculating damages.



113. In this section, I focus on analyst responses to the alleged curative disclosures as noted in analyst reports issued in the days following the disclosures. In particular, I first focus on revisions in two measures released by analysts—price targets and quarterly revenue forecasts—before reviewing analyst commentary.

*1. Analysts' Price Target and Revenue Forecast Revisions Following the June 16 and 19, 2017 Disclosures*

114. The Complaint alleges that the market first learned of a whistleblower lawsuit filed by a former CenturyLink employee, Ms. Heidi Heiser, (“Heiser lawsuit”) on June 16, 2017, from a *Bloomberg* article entitled “CenturyLink Is Accused of Running a Wells Fargo-Like Scheme.”<sup>149</sup> Based on information in the Heiser lawsuit complaint, *Bloomberg* reported that the Company had allegedly engaged in a practice of charging for unauthorized services.<sup>150</sup> The *Bloomberg* article also made an association between billing issues at CenturyLink and the concerns about the recent and much-publicized Wells Fargo fake account scandal.

115. If any of this information was news to analysts, in ways that they considered sufficiently material to change their assessment of CenturyLink’s equity value, such a change would typically be reflected in their target price estimate. The Complaint alleges that: “Analysts immediately reacted and reassessed their views of CenturyLink stock based on these revelations, and connected the share price decline to the disclosures of the Company’s misconduct contained in Heiser’s lawsuit.”<sup>151</sup> However, my review of the relevant analyst reports does not find support

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<sup>149</sup> Complaint, ¶¶ 152–56.

<sup>150</sup> The Wells Fargo fake account scandal had come to public attention a few months prior, in September 2016. For a timeline of key events in the Wells Fargo scandal, *see*, for example, “Wells Fargo’s Twenty Month Nightmare,” *@CNMONEY*, April 24, 2018. Available at: <<https://money.cnn.com/2018/04/24/news/companies/wells-fargo-timeline-shareholders/index.html>>.

<sup>151</sup> Complaint, ¶ 155.

for such a conclusion about the reaction from financial analysts. As I show in **Exhibit 24**, not a single one of the 14 analysts that contributed target price estimates to Thomson Reuters in June and July 2017 lowered their target price estimate in the week following the June 16 (a Friday) and June 19 (a Monday) alleged corrective disclosures. In fact, the first contributing analyst to change their price target did so on June 29, 2017 (two weeks later) when they dropped the price target from \$24 to \$23 per share.<sup>152</sup> About a week later, on July 5, 2017 Cowen & Company *raised* their price target from \$25 to \$27. If the analysts perceived the disclosures in the *Bloomberg* article on June 16 and June 19 to be significant in any respect or likely to be accurate reflections of a widespread fraud, they apparently did not consider it sufficiently significant for them to revise their valuation estimates underlying their price targets.

116. Since the allegations relate to CenturyLink's sales practices, I also reviewed the annual revenue forecasts that analysts periodically update through the fiscal year. This review is summarized in **Exhibit 25** and shows that in the two weeks following the June 16 and 19, 2017 publication of stories related to the Heiser lawsuit, only three of the 17 analysts who were actively contributing their estimates of annual full year revenue forecasts (to Thomson Reuters at the time) lowered their forecasts for FY 2017 revenue.<sup>153</sup> Analysts from Gabelli and Company attributed the reduction in their revenue FY 2017 estimates to factors that had nothing to do with the alleged corrective disclosures. Gabelli analysts said: "CTL noted that as a result of the colocation data center business sale on 5/1, the impact of this transaction will result in a

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<sup>152</sup> This analyst contributed their estimates to the Thomson Reuters database on an anonymous basis, so I cannot identify the particular investment bank or brokerage house from which the report was issued. The identity of the analyst and the issuing firm is known to Thomson Reuters but is not made public.

<sup>153</sup> Gabelli and Company, MoffettNathanson, and an anonymous contributor lowered their estimates of CenturyLink's annual FY 2017 revenue within two weeks of the June 16 and 17, 2017 alleged curative disclosures. The MoffettNathanson report was not available to me.

reduction of ~\$400 million to 2017 annual operating and core revenues ... ” and on that basis guided to a lower FY17 revenue estimate.

2. *Analyst Commentary Following the June 16 and 19, 2017 Disclosures*

117. I also reviewed the commentary in analysts’ reports that was published soon after the alleged corrective disclosures from June 2017 and that were available to me. For example, Morningstar’s report on June 16, 2017 downplayed the significance of the news by noting that it relates to the smaller and less strategically significant Consumer segment of the business.<sup>154</sup>

Specifically, the report noted:

*These charges relate to the consumer division, which has been struggling for some time and accounts for only about one third of the firm's revenue ... We don't expect this will affect the merger. After the merger, the consumer division will only account for about one fourth of CenturyLink's revenue.*<sup>155</sup>

118. Morgan Stanley’s note, issued on June 19, 2017, was titled “CenturyLink Lawsuit Raises Questions but Precedents Suggest Limited Impact.” Although it discussed the lawsuit in some detail, overall it did not consider the Heiser lawsuit to be consequential for CenturyLink’s investors.<sup>156</sup> The note said:

*Telecom operators face lawsuits and regulatory actions for “cramming” extra services onto customer bills from time to time, but the ultimate settlements usually are not that material. For example, back in 2015 Verizon (\$90m) and Sprint (\$68m) agreed to settlements related to unauthorized charges on customer wireless*

<sup>154</sup> “CenturyLink Accused in Lawsuit of Signing Up Customers to Services They Didn't Request,” *Morningstar*, June 16, 2017, p. 1.

<sup>155</sup> “CenturyLink Accused in Lawsuit of Signing Up Customers to Services They Didn't Request,” *Morningstar*, June 16, 2017, p. 1.

<sup>156</sup> “CenturyLink Lawsuit Raises Questions but Precedents Suggest Limited Impact,” *Morgan Stanley*, June 19, 2017, p. 1. Gabelli and Company also issued a report on June 19, 2017, but this report was silent on the Heiser lawsuit.

*bills in a settlement with the FCC. AT&T (\$105m) and T-Mobile (\$90m) had settled the previous year.*

*... CenturyLink is a large company with ILEC operations in 37 states. There are several potential financial exposures to consider. First is the direct cost of litigating and ultimately resolving this lawsuit. Then there is the potential for other related costs from regulatory fines, customer refunds and other similar lawsuits etc. Finally, there is the ongoing business impact. To the extent that there has been overcharging, it will be important to assess how material it has been to the financial statements. It appears from the lawsuit that some of the alleged actions may have boosted metrics, but not all would have resulted in customer revenues.*

*... We would also expect the public utility commission in Arizona and potentially elsewhere (and possibly the FCC) to investigate the allegations. Indeed, it will be interesting to see whether customers have made any complaints in the past around these issues to regulators and what were the results of any of these proceedings.<sup>157</sup>*

119. As the above excerpts clearly show, Morgan Stanley analysts considered the issue in detail, anticipated the likely developments—including regulatory and legal developments—and concluded, based on available information, that it would have limited impact. The Complaint selectively cites this same report to give the false impression of a more dire Morgan Stanley opinion than what someone reading the full report would conclude.<sup>158</sup>

120. A report issued from Bank of America Merrill Lynch (“BAML”) on June 22, 2017, focused on recent management changes and essentially dismissed the lawsuit as a mere “distraction.” In a section of the report devoted to the new lawsuit, it expressed an opinion similar to the one from Morgan Stanley, that is, that the lawsuit would have only limited impact. The report noted:

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<sup>157</sup> “CenturyLink Lawsuit Raises Questions but Precedents Suggest Limited Impact,” *Morgan Stanley*, June 19, 2017, pp. 1, 2.

<sup>158</sup> Complaint, ¶ 156.

*Lawsuit is a distraction, not relevant to M&A, in our view*

*... [S]peaking with peers, we believe it is industry practice for carriers to monitor, record and review sales practices, allowing CTL to address the claim. Speculation about the potential monetary liability, **if anything eventually were to be discovered**, also appears hyperbolic in our view. According to the FTC, in 2014, it reached the 'largest ever' financial settlement with a major telecom carrier of \$105m. This would be equivalent to \$0.19/share for CTL.<sup>159</sup>*

121. A Barclay's June 26, 2017 report also commented on the original lawsuit and a related subsequent class action lawsuit. The analysts essentially reached a similar "limited impact" conclusion since the lawsuit related to the strategically less significant consumer sector, noting:

*Lawsuit Alleges Fraudulent Business Practices: In a wrongful termination lawsuit, a former CenturyLink employee alleged the use of fraudulent business practices in the company's consumer business. Specifically, the lawsuit claims employees were allowed to indicate customer approval of new services or lines which would sometimes result in charges that hadn't actually been authorized. Following the original claim, a separate class action lawsuit was filed.*

*... We also note that the allegations seem to focus on the company's consumer business, an area that will be less of a strategic focus for the joint entity (~24% of the joint entity). That being said, until further light is shed on the matter we do expect the allegations to be an overhang as the starting point status of the CenturyLink business remains a key question of the joint entity's prospects going forward.<sup>160</sup>*

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<sup>159</sup> "New post-deal management structure plays to strengths," *Bank of America Merrill Lynch*, June 22, 2017, p. 1 (emphasis added).

<sup>160</sup> "The Roz Report: A Risk Framework for Recent CenturyLink Allegations," *Barclays*, June 26, 2017, p. 1 (emphasis added).

122. According to a July 5, 2017 report, analysts from Cowen and Company were unsure of the impact but also expressed doubt about finding sufficiently persuasive proof of wrongdoing in a well-regulated firm such as CenturyLink. Specifically, the report said:

*We can simply book-end the risk: on one end the suit can be an unsubstantiated claim by a disgruntled worker, on the other extreme it could be a large-scale incentivized/compensated ‘Wells Fargo-like scheme.’ We have doubts from our own experience with care center operations, and the compliance/legal oversight involved as an FCC incumbent, anything in writing (customer care retention/upsell scripts, policy procedures, etc.) will surface nor can we foresee any corporate level directives explicit in writing. However unwritten/verbal persuasion (as alleged) and compensation structure could be so heavily influential (with negligent oversight) that fines could be levied, if proven.<sup>161</sup>*

#### **B. Analysts’ Reactions to the Alleged Curative Disclosures on July 12, 2017**

##### *1. Analysts’ Price Target and Revenue Forecast Revisions following the July 12, 2017 Disclosures*

123. Once again, not a single one of the 14 analysts that contributed price targets to Thomson Reuters adjusted their price target in the interval between the July 12 disclosure and the Q2 2017 earnings announcement on August 2, 2017. (See **Exhibit 24.**) Over the same period, only four of the 17 analysts that contributed revenue forecasts to Thomson Reuters lowered their revenue estimates for FY 2017, while one actually *raised* their estimates in the same interval. (See **Exhibit 25.**)

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<sup>161</sup> “Introducing Combined LVLTT Model; More Stable Ground but Questions Remain,” *Cowen and Company*, July 5, 2017, p. 5 (emphasis added).

2. *Analyst Commentary Following the July 12, 2017 Disclosures*

124. On July 12, 2017, the market learned via news reports that the Minnesota AG had filed suit against CenturyLink following a year-long investigation.<sup>162</sup> According to the Complaint, the Minnesota AG’s complaint provided “significant and newly disclosed detail concerning the means by which the Company cheated customers.”<sup>163</sup> The news and details of the lawsuit were published in outlets including *Bloomberg*.

125. Morningstar issued a report on the day the news of the Minnesota AG’s suit was released, explaining that they had reduced their fair value estimate of CenturyLink stock as a result of the lawsuit (from \$36 to \$34 per share). They cited an expectation of consumer losses for a few quarters due to bad publicity (though not specifically because of any actual finding of fraud). Importantly, they did not mention an expectation of a shift in sales practices having a long-term impact on revenue, as would be expected if there was an expectation that past results had been based on practices that would discontinue into the future.

*The reduction of our fair value estimate is primarily due to reduced outlook on CenturyLink's consumer broadband business, as we believe the **publicity of these lawsuits** will likely result in residential customer defections for a few quarters. We now expect consumer broadband revenue to decline between 2% and 3% in 2017 and 2018, before resuming to low-single-digit growth in 2020 and 2021.*

*... Our fair value estimate for the merged entity between CenturyLink and Level 3 is reduced to \$30 per share, down from \$32, while we value the stand-alone entity of CenturyLink at \$34 per share, down from \$36 per share. This is due to several lawsuits regarding its sales practices of overbilling customers, which we*

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<sup>162</sup> Complaint, ¶¶ 163–64.

<sup>163</sup> Complaint, ¶ 164.

*believe would result in some customer losses over the next few quarters as a result of **bad publicity**.*<sup>164</sup>

126. Days after the news of the Minnesota AG lawsuit, on July 17, 2017, analysts at BAML expressed using even stronger language than their opinion in June that the lawsuit should have a limited impact, stating that the issue had “been blown out of proportion in terms of timing and possible financial relevance.”<sup>165</sup>

*Lawsuits. CTL shares have had a negative reaction due to various lawsuits stemming from a wrongful termination complaint filed by a former employee. The substance of the complaints, according to reports, relates to excess services sales reps were pressured to sell. According to the FTC, in 2014, it reached the ‘largest ever’ financial settlement with a major telecom carrier of \$105m. This would be equivalent to \$0.19/share for CTL. **We believe the issue has been blown out of proportion in terms of timing and possible financial relevance.** We will look to the call for any update the company can provide on the lawsuits.*<sup>166</sup>

127. On July 19, 2017, analysts at Morgan Stanley acknowledged a pullback from investors after news of the Minnesota AG lawsuit, but observed that “the sell off looks overdone.”<sup>167</sup>

*We think expectations are appropriately low heading into 2Q17 results, given cautious wireline industry commentary. The pending lawsuits create a NT overhang, but **the sell off looks overdone.** Reiterate Overweight.*

*... Adjusted for the expected issuance of new shares for the Level 3 merger, the pullback has erased more than \$5b of market cap value. While there are several possible drivers of the decline, including*

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<sup>164</sup> “CenturyLink Sued by Minnesota Attorney General on Overbilling Customers; Cutting FVE to \$30,” *Morningstar*, July 12, 2017, p. 2 (emphasis added).

<sup>165</sup> “2Q preview & model book - Weathering tough 2Q and looking for better 2H,” *Bank of America Merrill Lynch*, July 17, 2017, p. 27.

<sup>166</sup> “2Q preview & model book - Weathering tough 2Q and looking for better 2H,” *Bank of America Merrill Lynch*, July 17, 2017, p. 27 (emphasis added).

<sup>167</sup> “2Q17 Preview: Counting Down to Level 3,” *Morgan Stanley*, July 19, 2017, p. 1.



*nervousness ahead of 2Q17 results, the primary driver has been the announcement of lawsuits alleging CenturyLink has been inappropriately charging customers.*<sup>168</sup>

128. The Cowen and Company report released on July 24, 2017 notes that the lawsuit may be having an impact, but lists “broader fundamental erosion” as the number one driver of declines observed in CenturyLink and competitors Frontier and Windstream.<sup>169</sup>

*The declines are partly driven by (1) broader fundamental erosion, specifically outsized legacy service declines and muted strategic growth against aggressive cable operators, and (2) partly by company specific issues (Frontier: CTF integration pain, CenturyLink: more recently consumer fraud allegations, Windstream: BDS headwinds).*<sup>170</sup>

*Shares remain under pressure with challenged ILEC fundamentals, the guidance-miss set up, and the Consumer Fraud allegation, which have clearly become more legitimized with state lawsuits, making it incrementally more difficult to find a bottom in a worst case scenario view (and without any recent telco precedent).*<sup>171</sup>

129. Finally, in a report issued on August 3, 2017, analysts at Oppenheimer Equity Research expressed doubts on the allegations and did not expect the alleged fraud to be “about a material amount of revenue.”<sup>172</sup> Specifically, the report said:

***CenturyLink Accused of Aggressive Sales Culture; Unlikely, in Our Opinion:*** *Press reports in mid-June 2017 highlighted a lawsuit by a former CTL employee, accusing CTL of unethical/fraudulent sales tactics. While it's possible, we do not expect it was a material amount of revenue or anything fraudulent. We view any weakness as a strong buying opportunity, because even if the allegations are*

<sup>168</sup> “2Q17 Preview: Counting Down to Level 3,” *Morgan Stanley*, July 19, 2017 (emphasis added), p. 1.

<sup>169</sup> “C2Q17 Telco Services Preview,” *Cowen and Company*, July 24, 2017, p. 1.

<sup>170</sup> “C2Q17 Telco Services Preview,” *Cowen and Company*, July 24, 2017, p. 1.

<sup>171</sup> “C2Q17 Telco Services Preview,” *Cowen and Company*, July 24, 2017, p. 5.

<sup>172</sup> “CenturyLink and LVT Report In-Line Quarters; CTL Guides Down Slightly, as Expected; Focus Remains on Transformative Merger,” *Oppenheimer*, August 3, 2017, p. 3.

*true, CTL is turning over its management team and will be 70%+ enterprise-focused.*<sup>173</sup>

130. As is clear from this discussion, to the extent financial professionals considered the lawsuits, they were at most uncertain whether the allegations were true. And, if any of the allegations were eventually shown to be true, they were uncertain of the scope of the problem. Overall, they generally expected minimal actual impact on financial performance, as reflected in the very limited revisions to financial targets. Importantly, Dr. Hartzmark himself has not done any analysis on the actual *resolution* of the litigations and investigations to determine whether, in fact, it was ever shown that there was real substance to the allegations. If a stock price reacts to the filing of litigation and the commencing of investigations that turn out to not have substance, these should not be considered a “curative disclosure” of an actual fraud, and cannot be the basis for a measure of common harm. In the logical extreme, if alleging fraud via lawsuit causes a stock to drop, and that FUD-related drop is then used as the basis for a common measure of damages in a securities lawsuit such as this, then there would be effectively *no way* for companies to avoid having a class certified, regardless of the economic substance of the allegations.

## **VI. DR. HARTZMARK’S EQUITY EVENT STUDY IS FLAWED**

### **A. Background on Event Study Methodology**

131. Dr. Hartzmark has conducted an equity event study and identified stock price changes for CenturyLink’s stock (ticker symbol “CTL”) on the three alleged curative disclosure dates that he claims are not explained by either overall stock market movements or movements

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<sup>173</sup> “CenturyLink and LVT Report In-Line Quarters; CTL Guides Down Slightly, as Expected; Focus Remains on Transformative Merger,” *Oppenheimer*, August 3, 2017, p. 3 (emphasis in original).

due to industry effects. He has not identified any inflation ribbon, has not disaggregated the allegations and identified inflation ribbons that would be associated with various categories of allegations, or has not done any analysis on the reasonableness of the assumption that these dates revealing lawsuit allegations will be shown to be actual revelations of fraud. These are clearly serious limitations of his work, and by simply assuming such work can be done, Dr. Hartzmark provides no economic substance for any determination of common class issues related to measuring damages. In the remainder of this section, I focus more specifically on his methodology for his event study, identify problems, and show the impact of correcting these problems. I find that one of his alleged disclosure dates should not even be considered, given that it did not have a statistically significant decline.

132. Like Dr. Hartzmark, I have conducted an event study to determine the change in CenturyLink's stock price that can be attributed to firm-specific events, after isolating the impact of general market-wide and industry-wide factors. Event studies are a commonly-used set of statistical techniques that allow economists to measure the amount of security price movement that can be attributed to specific events.<sup>174</sup> On any given day, the price of a company's security moves in response to a combination of company-specific news, more general developments across the broader industry to which the company belongs, and evolving conditions for the market as a whole. The purpose of an event study is to identify the portion of security price movement (*i.e.*, the percent changes or "returns" on the stock at issue) that may be a consequence of company-specific news, after accounting for the impact of industry-wide and market-wide conditions on stock price movements.

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<sup>174</sup> MacKinlay, A. Craig, "Event studies in economics and finance," *Journal of Economic Literature*, Vol. XXXV, March 1997 ("MacKinlay 1997"), p. 13.

133. For CenturyLink, I used the event study methodology to examine whether the allegedly curative disclosures on June 16, June 19, and July 12, 2017 had a statistically significant impact on CenturyLink's stock price on the respective disclosure days. As discussed earlier, I also used the event study methodology to investigate whether CenturyLink's alleged misrepresentations<sup>175</sup> potentially impacting the Company's stock price on 52 corresponding market days actually impacted CenturyLink's stock price on those days.

134. After identifying the event dates to be studied, the second part of an event study involves modeling and measuring the price response of the security to the event(s) of concern. This entails specifying a regression model that describes (1) the relationship between the returns of the security and the returns on portfolios of assets that reflect the market as a whole, and (2) the industry to which the firm belongs.<sup>176</sup> The researcher can then estimate (or "run") the regression model using data on security, industry, and market returns to obtain estimates of the regression model's coefficient values.<sup>177</sup> These estimated coefficient values allow the researcher to calculate the security's "predicted return," which is the level of return that one would expect given two of the factors that affect the security's returns: the actual returns of the industry and the overall market on the day of interest. As an example, if a coefficient on the broad stock market index is 0.5, if the overall market went up by 1 percent on a given day, the predicted

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<sup>175</sup> Complaint, Appendix A and ¶¶ 190–263.

<sup>176</sup> MacKinlay 1997, p. 18. A regression is a statistical technique that measures the extent to which changes in the value of a particular variable (*i.e.*, the "dependent variable") are related to changes in the value of other variables (*i.e.*, the "explanatory" or "independent variables").

<sup>177</sup> For event study results to be reliable, it is necessary that the market for the underlying security is informationally "efficient," meaning that new publicly-available information is reflected in the stock price relatively quickly and accurately. For purposes of the analysis in this report, I assume that CenturyLink's common stock traded in an efficient market during all relevant time periods.

return for the stock being studied would be a 0.5 percent increase. A similar approach is used for the industry-specific return.

135. From this predicted return, the researcher can calculate the security's "abnormal return," "excess return," or "residual return" as the difference between the actual return on the security and the predicted return. An abnormal return that is greater than zero means that the stock had a higher return than would have been predicted by market and industry factors alone; for a negative abnormal return, the opposite is true.

136. In the final step in an event study, the researcher performs statistical tests to determine whether the abnormal returns are sufficiently large in either direction to be considered statistically significant.<sup>178</sup> Stock returns include random fluctuations over time, even in the absence of meaningful news. The purpose of a statistical hypothesis test is to determine whether, given the variability of returns of a security and controlling for market and industry factors, a particular day's abnormal return is within the bounds of random price movements described above. If an abnormal return is within these bounds, one says that it is not "statistically significant," or that it is impossible to distinguish from a result obtained purely by chance.

137. In terms of price impact, if the residual or abnormal return after an alleged misrepresentation or misstatement is not both positive and statistically significant, then there is no reliable evidence that the alleged misrepresentation caused artificial inflation of the stock price. Similarly, if an abnormal return following an alleged curative disclosure is not both

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<sup>178</sup> Statistical significance at the 90 percent, 95 percent, and 99 percent confidence levels are usually presented. However, the 90 percent confidence level provides only weak evidence of statistical significance. *See, e.g.,* Ross, Sheldon M., "Introductory Statistics," *Academic Press*, 2005 (Second edition), p. 429. As a result, practitioners typically rely on significance at the 95 percent or 99 percent confidence level.

negative and statistically significant, then there is no reliable evidence that the alleged disclosure caused the removal of any alleged inflation.

### **B. Dr. Hartzmark's Estimates of Abnormal Return Depend upon His Model Assumptions**

138. Consistent with the steps described above, I developed a regression model to estimate the abnormal return of CenturyLink's stock on certain days. I chose the same broad market index as Dr. Hartzmark, the S&P 500 index.<sup>179</sup> For the industry index, after a careful selection process, I chose the Dow Jones U.S. Select Telecom ("DJSTEL") index.<sup>180</sup> This choice is different from the industry index that Dr. Hartzmark selected, which I discuss below. Using the returns on these indices as explanatory variables, I estimated an event study regression for each event date at issue over a 120-day rolling event window that ends on the trading day prior to the event date. This choice of the length of the estimation window is consistent with Dr. Hartzmark's choice.<sup>181</sup>

139. To summarize, my regression model is similar to Dr. Hartzmark's other than in the following respects: (1) the choice of the industry index; (2) the days excluded from the estimation window; and (3) the method for calculating industry residuals. Regarding (2), unlike Dr. Hartzmark, my estimation window does not exclude earnings announcement days. Dr. Hartzmark excludes from his estimation period 21 days that relate to "the corrective disclosure dates alleged in the Complaint and days on which the Company announced earnings results.

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<sup>179</sup> See Hartzmark Report, Appendix D for a detailed description of Dr. Hartzmark's event study model.

<sup>180</sup> Following a methodology similar to Dr. Hartzmark's, I removed the impact of CenturyLink's daily return from the daily returns on the industry index. See Hartzmark Report, Appendix D, p. 1, note 3.

<sup>181</sup> As noted below, Dr. Hartzmark excludes earnings announcement days from his estimation window. I do not exclude these days. My estimates remain substantially unchanged when I exclude prior alleged curative disclosure dates (June 16 and June 19, 2017) from the July 12, 2017 regression.

These are dates on which CenturyLink's stock price might be affected by disclosures of unexpected firm-specific material information.”<sup>182</sup> This exclusion is selective and, in my opinion, inappropriate. As the Complaint alleges, there were a total of 52 market days during the Class Period on which “unexpected firm-specific material information” could have impacted the CenturyLink securities prices. These include, among others, and as noted in Appendix A of the Complaint, days on which various 10-Ks and 10-Qs were filed and investor conferences were held (or the immediately following market day if the news was released after market hours). In contrast to Dr. Hartzmark's selective exclusion approach (excluding 21 of the 52 days) I include all trading days in the 120-day estimation window. Regarding (3) above, similar to Dr. Hartzmark, I use the residuals from a regression of industry returns on market returns (“industry residuals”) as an explanatory variable in my regression model, but I estimate this regression over a 120-day rolling window, whereas Dr. Hartzmark uses a fixed estimation window that spans the entire Class Period.<sup>183</sup> For ease of exposition, I refer to my specification of the regression model as the “Deal Model” and Dr. Hartzmark's specification as the “Hartzmark Model.” **Exhibit 26A** summarizes the abnormal return estimates for the three allegedly curative disclosure dates based on the Deal Model and the Hartzmark Model.

140. Dr. Hartzmark does not identify any specific days among the 52 potentially impacted market days where he identifies inflationary news and tests for positive abnormal returns. Instead, he only focuses on three specific alleged curative disclosure days. As I discussed earlier, I find that only four of the 52 alleged inflationary market days had positive and statistically significant abnormal returns, with others having negative and statistically significant

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<sup>182</sup> Hartzmark Report, Appendix D, pp. 2, 3.

<sup>183</sup> See Hartzmark Report, Appendix E, p. 18, note 7.

abnormal returns, and still others have returns that were not statistically significantly different from zero.

141. Using the Deal Model, I calculate abnormal returns on select event days and assess their statistical significance. For each of the three alleged curative disclosure days, I present the regression coefficient estimates and abnormal return, along with indications of their statistical significance, as well as a measure of overall fit/explanatory power of the model (“Adjusted R<sup>2</sup>”). **Figure 12** below (also shown as **Exhibit 26A**) presents my findings and compares these to Dr. Hartzmark’s findings.

**Figure 12**  
**CenturyLink Event Study Abnormal Returns on Alleged Corrective Disclosure Dates**

	<i>Hartzmark Model</i>			<i>Deal Model</i>		
	<u>June 16, 2017</u>	<u>June 19, 2017</u>	<u>July 12, 2017</u>	<u>June 16, 2017</u>	<u>June 19, 2017</u>	<u>July 12, 2017</u>
Abnormal Return (AR)	-4.8%	-2.3%	-4.2%	-5.1%	-0.8%	-3.6%
t-statistics	(-3.96)	(-1.89)	(-3.46)	(-4.54)	(-0.68)	(-2.96)
p-values	0.000	0.061	0.001	0.000	0.499	0.004

142. I find that on June 16, 2017, after controlling for the impact of market- and industry-wide factors, CenturyLink’s stock experienced a stock price decline (that is, a negative abnormal return) of -5.1 percent.<sup>184</sup> This abnormal return was statistically significantly different from zero, as indicated by the t-statistic of -4.54. Dr. Hartzmark’s model specification yielded a statistically significant abnormal return estimate of -4.8 percent on this date.<sup>185</sup> (See **Exhibit 26B**.)

<sup>184</sup> **Exhibit 26B**, column [A].

<sup>185</sup> Hartzmark Report, p. 38.



143. On June 19, 2017, the abnormal return on CenturyLink's stock was -0.8 percent and was not statistically different from zero.<sup>186</sup> Using his specification of the regression model, Dr. Hartzmark estimates abnormal returns of -2.3 percent for this day, but also finds it not statistically significant at the commonly accepted 95 percent level.<sup>187</sup> Thus, despite the use of two somewhat different models, neither Dr. Hartzmark nor I find CenturyLink stock's abnormal return on June 19, 2017 to be statistically significant from zero when we use scientifically accepted standards for testing statistical significance.

144. Another difference in our approaches is that Dr. Hartzmark reports a two-day cumulative return over the June 16 and June 19 trading days. I do not believe it is appropriate to consider a two-day trading window. If, as Dr. Hartzmark determines, a stock trades in an efficient market, its price will respond to new information very quickly. By using a two-day return, Dr. Hartzmark has effectively used the large one-day abnormal return on June 16 to implicate June 19 as well, even though June 19 does not have a one-day statistically significant negative abnormal return.

145. Finally, I find that on July 12, 2017, after controlling for the impact of market- and industry-wide factors, CenturyLink's stock experienced an abnormal return of -3.6 percent.<sup>188</sup>

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<sup>186</sup> **Exhibit 26B**, column [B].

<sup>187</sup> See Hartzmark Report, p. 39. Regarding the determination of whether this return value is statistically significant, Dr. Hartzmark lays out the principles for such a determination in the appendix to his report, where he states: "I use the scientifically accepted level of certainty and declare statistical significance at a 95% level. This means that when CenturyLink's abnormal return is statistically significant, I can conclude that the CenturyLink abnormal return is outside the bounds of what would be expected by chance, with at least 95% confidence." Hartzmark Report, Appendix D, ¶ 9. Per Dr. Hartzmark's own (scientifically accepted) standards, his estimate of -2.3 percent abnormal return on CenturyLink stock on June 19, 2017 is not statistically significant from zero, even though in the body of his report he deviates from his elsewhere stated (and scientifically robust) principles and appears to suggest otherwise, stating that "[a]lthough the p-value of 6.12% denotes statistical significance above the commonly reported 5% level, it also indicates that the observed price decline is different from zero with a 94% level of confidence." Hartzmark Report, p. 39.

<sup>188</sup> **Exhibit 26B**, column [C].

This abnormal return was statistically significantly different from zero, as indicated by the t-statistic of -2.96. Dr. Hartzmark estimated statistically significant abnormal returns of -4.2 percent on this day.<sup>189</sup>

### C. Dr. Hartzmark's Choice of an Industry Index is Flawed

146. Dr. Hartzmark and I both use standard event study methodology to estimate the impact of significant news on CenturyLink's stock price. Despite the similarity in our overall approaches, we make a different choice regarding a key parameter in the event study methodology, specifically the industry index used to control for industry effects.<sup>190</sup> Dr. Hartzmark chooses the S&P Composite 1500 Telecommunication Services Total Return Index ("SPTRSC50"), while I select DJSTEL.

147. As noted earlier, while there are three differences between the Deal Model and the Hartzmark model, the industry index is the only one of these that makes a meaningful difference. To show that the difference in the industry index is the primary driver of the difference in abnormal return estimates between the Hartzmark Model and the Deal Model, in **Exhibits 27A - 27C** I show, side by side, the abnormal returns reported by Dr. Hartzmark (in column [A]) as compared to the estimates obtained from the Deal Model if the latter used the same industry index as Dr. Hartzmark (column [B]). The magnitude of abnormal returns in columns [A] and [B] on all three exhibits is close. That is, if I eliminate just one of the three sources of difference between the Deal Model and the Hartzmark Model (*i.e.*, the industry index), the resulting

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<sup>189</sup> Hartzmark Report, p. 40.

<sup>190</sup> Brown and Warner (1985) find that in cross-sectional studies modeling choices generally do not have a material impact on the performance of event studies. *See* Brown, S. J. and J. B. Warner, "Using Daily Stock Returns: The Case of Event Studies," *Journal of Financial Economics*, 1985, 14(1): 3–23, p. 12. However, in securities fraud settings where single firms are analyzed, some modeling choices can have a significant impact on outcomes.

estimates from the two models are largely similar. A reasonable inference from this exercise is that any meaningful difference in estimates produced by the two models is because of the different industry index, rather than the other differences, such as the decision about particular dates to include or exclude.

148. To select the appropriate industry index for the Deal Model, I followed a systematic process which largely mirrors Dr. Hartzmark's reported method. First, I identified all indices available on *Bloomberg* that include CenturyLink stock and, based on a description of the index, narrowed the list down to those that covered domestic firms in the Telecom industry and for which daily index return data was available for the relevant period. This process identified all five of the indices that Dr. Hartzmark considers in his analysis as potential candidates plus an additional one, the DJSTEL.<sup>191</sup> As a next step, from this set I identified the index that had the "best fit" in the regression model, as assessed by the statistical measure Adjusted R-squared.<sup>192</sup> <sup>193</sup> A higher Adjusted R-squared reflects a better statistical fit. I made this assessment for each of the three allegedly curative disclosure dates. As I show in **Exhibits 27A - 27C**, for each of the three dates, the regression model with DJSTEL as the industry index has a much better fit, as measured by Adjusted R-squared, than models using most of the other industry indices tested, including the one selected by Dr. Hartzmark (*i.e.*, SPTRSC50). For instance, in **Exhibit 27A**, the

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<sup>191</sup> Hartzmark Report, Appendix D, p. D-1, note 2.

<sup>192</sup> See Baum, Christopher F., "An Introduction to Modern Econometrics Using Stata," *Stata Press*, 2006, pp. 77–78. In a regression model, Adjusted R-square measures the proportion of variation in the dependent variable (in this case CTL daily returns) that is explained by the variation in the independent or explanatory variables (in this case the returns on the market and industry index). A value of 0.45, or 45 percent, in a regression estimate of the Deal Model would indicate that the industry and market index explain 45 percent of the variation in CTL returns.

<sup>193</sup> In the set of industry indices tested, the S&P Supercomposite Alternative Carriers Sub Industry Total Return Index ("S15ALTC") yields an Adjusted R-squared of greater than 90 percent in the regression model, and should therefore qualify as the index with the "best fit." But a closer examination shows that the high Adjusted R-squared is explained by the fact that CenturyLink is the biggest of its very few constituents, so Index returns are driven by CTL returns and the two are highly correlated. Thus, this is not a good candidate for inclusion in the event study model.

regression model that uses the DJSTEL index (column [G]) has an Adjusted R-squared of 0.45 as compared to 0.20 in the regression model that uses Dr. Hartzmark's industry index. Similarly, estimates for the other two dates in **Exhibit 27B** and **Exhibit 27C** show that the regression model which uses the DJSTEL index (column [G]) has an Adjusted R-squared that is more than twice as large as the regression model that uses Dr. Hartzmark's industry index (column [B]).

149. As a final check on the appropriateness of my chosen industry index, I also reviewed constituent firms in the DJSTEL index and compared them to the list of CenturyLink peers identified in other sources. I present this analysis in **Exhibit 28**. First, I reviewed the peers that CenturyLink identifies to benchmark the Total Shareholder Return ("TSR") on its stock and found substantial overlap between the 18 firms (excluding CenturyLink) in the DJSTEL index and the 26 peers identified as benchmarking peers in CenturyLink's 2017 proxy.<sup>194</sup> As a second reasonableness check, I identified four brokerage firms that issued an analyst report on CenturyLink in both 2013 and 2017 (the start and end of the Class Period) and that had also listed a set of peers or close competitors for CenturyLink. I found that any peer that was identified by more than one source in 2013 and 2017 was included in the DJSTEL index. Thus, my choice of the DJSTEL index for estimating the event study model regressions is supported by a robust selection process.

150. In his deposition, Dr. Hartzmark discussed that he identified candidate indices and then selected the one with the best fit.<sup>195</sup> The index I selected, and which he did not consider, had

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<sup>194</sup> Like many firms, CenturyLink's proxy identifies two sets of peers, one for benchmarking executive compensation and one for benchmarking firm performance. These two sets are not identical.

<sup>195</sup> Hartzmark Deposition, 114:8–115:8; 122:14–123:3.

the best fit among a set of reliable indices that might be considered. Regardless, his own selection criteria would suggest that the index I selected was preferable to the one he selected.

151. In addition to the fact that the DJSTEL provides a better statistical fit, Dr. Hartzmark's choice of SPTRSC50 is also less appealing on other grounds. **Exhibit 29A** shows that, as of the end of July 2017, the DJSTEL index included more firms than SPTRSC50 (19 vs. 14), with 12 firms that were common to both indices. **Exhibit 29B** shows that DJSTEL has an additional seven firms that do not overlap with SPTRSC50 constituent firms and the latter index has two firms that do not overlap with DJSTEL constituents. Focusing on firms that are excluded from one of the two indices, I find that DJSTEL-only firms had an average market capitalization at the end of 2016 of \$13.0 billion, which is equivalent to CenturyLink's \$13.0 billion market capitalization. In contrast, the average market capitalization of Dr. Hartzmark's SPTRSC50-only firms is much smaller at \$1.1 billion.

152. A comparison of average sales for the DJSTEL-only firms and the SPTRSC50-only firms tells a similar story. In fiscal year 2016, DJSTEL-only firms reported average sales revenue of \$10.9 billion, which is closer to CenturyLink's revenue of \$17.5 billion than the \$0.327 billion average for the SPTRSC50-only firms. Further, unlike SPTRSC50, the DJSTEL index includes firms such as Sprint, T-Mobil, and Vonage. These firms are a prominent part of the telecommunications industry and have similar economic opportunities and risks as CenturyLink.<sup>196</sup> Finally, the DJSTEL index includes a mix of firms, including those with the 3-digit SIC code 481 (representing the Telephone Communications sector) and the code 489 (which includes providers of Communications services via satellite). By contrast, the SPTRSC50

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<sup>196</sup> "CenturyLink, Inc. (CTL) - Financial and Strategic SWOT Analysis Review," *GlobalData*, June 13, 2016, p. 29; "CenturyLink's Legacy Businesses Declined while Strategic Services Disappointed; Shares Undervalued," *MorningStar*, May 4, 2017, p. 17; "Changing its Stripes... Very Slowly," *Macquarie Research*, May 3, 2017, p. 5.

is focused primarily on SIC 481.<sup>197</sup> Overall, the DJSTEL index captures the economics of a broader segment of the telecommunication sector while also including additional firms that, on average, share the economic characteristics of CenturyLink. For these reasons, as well as the fact that it provides a better statistical fit in the regression model, DJSTEL is a better index for the purpose of the analysis in this report.

#### **D. Intraday Evidence of Price Impact**

153. As discussed, Dr. Hartzmark has done nothing to assess the economic reasonableness of the allegations in the Complaint. In addition, he has not attempted or described a method by which inflation ribbons can be developed based on different allegations and different dates. While he does review certain intraday trading prices and news releases, he does not describe how such an analysis would be used to develop a common method to calculate damages. In this section, I also review the intraday trading information. I find that the price reactions to information often move in directions and magnitudes different than those that would be predicted based on a simple assumption that the Complaint will be shown to be true. Dr. Hartzmark has not described, much less calculated, how a common method would account for this variability and inconsistency.

##### *1. June 16 and July 12, 2017*

154. For two alleged corrective disclosure days, June 16 and July 12, 2017, Dr. Hartzmark identifies specific news stories that he concludes potentially explain a substantial

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<sup>197</sup> CenturyLink is a major provider of fixed broadband access. Competing technologies that can also provide “high-speed internet,” and therefore influence CenturyLink’s economic prospects, include: Cable Modem, Wireline - Fiber, Wireline - DSL and other, and Satellite & Fixed Wireless. This is in addition to mobile broadband through the mobile phone and other devices. See “USTelecom Industry Metrics and Trends 2018,” *USTelecom*, March 1, 2018, pp. 3, 4, and 19.

portion of intraday price movements.<sup>198</sup> I find that on June 16, despite the numerous news stories that were published after the 1:50 pm *Bloomberg* story (most of which reiterated the facts noted in the original *Bloomberg* story), CenturyLink's price recovered a substantial portion of the lost ground after an initial sell off. (See **Exhibit 30A**.) CenturyLink's stock price on July 12, 2017 rebounded somewhat after the initial dip even as the news was reported on major newswires such as *Reuters* and *DowJones*, before it drifted down towards the end of the day. (See **Exhibit 32A**.)

## 2. June 19, 2017

155. As noted, I do not find June 19, 2017 to have a statistically significant negative abnormal return. My event study analysis shows that, consistent with Dr. Hartzmark's results, on June 19, 2017, CenturyLink stock did not experience a one-day negative abnormal return that was statistically significant at the conventional 95 percent level. My analysis shows that CenturyLink stock's -0.8% abnormal return on June 19, 2017 has an associated p-value of 0.498, indicating that the observed price decline is different from zero with only a 50% level of confidence. However, I still conducted an intraday analysis on this day to illustrate the set of issues faced in identifying common damages measures.

156. In contrast to his discussion of the June 16 intraday prices, for June 19, Dr. Hartzmark points to no particular news story that could possibly explain a substantial portion of intraday price movements. Rather, he simply cites to the Complaint and makes a general assertion that, "[o]ver the weekend and throughout June 19, 2017, there were numerous news

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<sup>198</sup> Hartzmark Report, Appendix C, pp. 359, 360, 372–74.

stories, analyst reports and ‘reports of consumer class actions alleging systemic billing misconduct,’ many of which were related to the alleged corrective disclosure.”<sup>199</sup>

157. My analysis of relevant news stories from the close of market on Friday, June 16, 2017 to the close of market on Monday, June 19, 2017 identifies 19 news headlines, nine of which are press releases from law firms announcing that they are opening investigations into or filing suits against CenturyLink for its alleged cramming. (See **Exhibit 31B**.) Using intraday minute-by-minute price data, I show that on June 19, 2017 CenturyLink’s stock price did not appear to move in concert with, or in response to, the arrival of specific news that is relevant to this Action.

158. **Exhibit 31A** shows CenturyLink stock’s minute-by-minute price movement on June 19, 2017. Over the weekend prior to June 19, 2017 and before the market opened on the morning of June 19, 2017, at least three news stories were published with headlines such as “CenturyLink worker files lawsuit alleging fraud” and “CenturyLink faces class-action lawsuit seeking up to \$12 billion.”<sup>200</sup> (See events [1], [2], and [3] in **Exhibit 31B**.) Yet CenturyLink’s stock price opened on Monday at the same level as the Friday market close and, in fact, saw a sharp increase right after the 9:30 AM open, reaching its highest level at 9:35 AM. From there, between 9:55 AM and 10:55 AM, despite the 10:13 AM news release by Reuters/Bloomberg reiterating the \$12 billion lawsuit charged against CenturyLink (Event [6] in **Exhibit 31B**), CenturyLink stock kept steadily climbing and reached an even higher point than the opening price. The Equity Alert at 11:41 AM, the Shareholder Alert at 12:25 PM, and the news release at 12:49 PM that “Glancy Prongay & Murray LLP Commences Investigation on Behalf of

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<sup>199</sup> Hartzmark Report, p. 39.

<sup>200</sup> Factiva News Search.



CenturyLink, Inc. Investors”<sup>201</sup> (events [7] [8] and [9] in **Exhibit 31B**) were all followed by slight stock price increases. The 4 alerts and news stories that arrived after 2:00 PM (events [13] [14] [15] and [16] in **Exhibit 31B**), did not have much immediate impact on price, as the by-minute price remained stable toward the end of the trading day (and the price bounced back above where it had been just prior to those announcements).

159. It is true that through the day, CenturyLink’s stock saw an overall decrease in value on June 19, 2017, though not a statistically significant negative abnormal return. However, there is insufficient evidence to show that the 1.4% decrease is directly caused by any allegedly curative disclosures made that day. Notably, the only incidences of immediate price drop after the arrival of news was at 9:40 AM (Event [5] in **Exhibit 31B**) and at 1:42-43 PM (event [11] and [12] in **Exhibit 31B**). However, CenturyLink’s stock price bounced back starting from 9:43 AM and 1:50 PM, respectively, with no additional news. The major price declines during the day, for example from 10:54 AM to 11:31 AM, 12:29 PM to 12:36 PM, and 1:24 PM to 1:33 PM, were not immediately preceded by any news release. Therefore, the price movement and the timing of news arrival on this day do not seem to have any apparent correlation.

160. Second, the overall price drop is not unique to CenturyLink. I also plotted the by-minute price movement of Windstream, one of CenturyLink’s main comparable competitors. Windstream, which had no allegedly curative disclosures on June 19, 2017, also saw a similar price movement on the same day. Hence, it is uncertain if CenturyLink’s overall price drop is directly reduced by the curative disclosure or is simply reflective of a sub-industry effect and/or investor sentiment on that particular day.

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<sup>201</sup> Factiva News Search.

161. For all the reasons stated above, it is my opinion that although the closing price on June 19, 2017 was indeed lower than the opening price, the by-minute movement of CenturyLink's stock price is not consistent with the assumption that the drop can be considered a timely response to the arrival of specific allegedly corrective news. Thus, an assumption that this can be used for a common method of determining class damages is incorrect.

162. It is unclear from his report whether Dr. Hartzmark is arguing that the price reaction on June 19, 2017 was a delayed reaction to news released on June 16 or was a reaction to new information that came to light over the weekend and on the day itself. Careful analysis does not support either argument. The delayed reaction argument is not plausible, given Dr. Hartzmark's own evidence on market efficiency for CenturyLink stock. Additionally, Dr. Hartzmark and my analyses of intraday stock prices on June 16 and July 12 show that the stock price reacts rapidly (near-instantly) to the arrival of relevant news. Since the news was relatively straightforward, there is no reason to believe that the market needed additional time to process the information. The second argument, that it was new information or the cumulative effect of the new information that drove the stock price decline, is also not persuasive. As I have shown, the stock price movement does not correlate well with the arrival of specific news, and is marked by periodic positive spikes, which weighs against an accumulation of bad news theory.

163. Since the price movement on June 19 cannot plausibly be tied to the alleged curative disclosure on June 16, it does not make sense to consider a two-day cumulative abnormal return as Dr. Hartzmark has done.<sup>202</sup>

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<sup>202</sup> Hartzmark Report, p. 39.

164. In summary, I agree with Dr. Hartzmark regarding the use of event studies to identify abnormal returns. I also agree that on June 16 and July 12, 2017, there were abnormal returns that exceed the commonly used 95 percent statistical level of confidence, though our estimates differ due to his use of an inferior industry index. Neither of us finds the one-day June 19, 2017 abnormal return to meet the 95 percent statistical level of confidence, and when using my model it is not even close. I disagree that a two-day time window is a valid approach for measuring abnormal returns. I also conduct additional economic analysis that show that Dr. Hartzmark's blanket assumption that Plaintiffs' allegations will be shown to be true and can be used as the basis for a common approach to calculating damages is not supported, even without a full analysis of loss causation.

## VII. DR. HARTZMARK'S 7.60% NOTES EVENT STUDY IS FLAWED

165. Dr. Hartzmark offers an opinion with respect to only one of CenturyLink's outstanding debt securities, the 7.60% Notes.<sup>203</sup> For the 7.60% Notes, he opines, "[t]hroughout the Class Period, CenturyLink's 7.6[0] % Note[s] traded in an efficient market."<sup>204</sup> As part of his tests for market efficiency, he performs what he calls a "cause and effect" analysis that documents the price reaction of the 7.60% Notes in response to unexpected new information disclosed to market participants.<sup>205</sup> Specifically, he evaluates the price impact of credit ratings downgrades, which occurred on three separate occasions during the Class Period (as I detail

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<sup>203</sup> The 7.60% Notes is 30 year redeemable Note that was issued on September 21, 2009 and is due on September 15, 2039. It originally had a total face value of a \$400 million. In 2011, CenturyLink "reopened" the series and issued an additional \$400 million of debt securities with the same terms, except for the issue price and the issue date. The amount outstanding for the 7.60% Notes was \$800 million throughout the Class Period. *See* CenturyLink Form 8-K, September 22, 2009, Exhibit 4.1, pp. 1–6. *See also* CenturyLink Form 8-K, June 16, 2011, p. 2.

<sup>204</sup> Hartzmark Report, p. 6.

<sup>205</sup> Hartzmark Report, pp. 68–73.

below), and concludes that “the information about the credit rating decline was new, material, unanticipated information, which resulted in a price decline for the 7.6[0]% Note[s].”<sup>206</sup>

166. The 7.60% Notes are obviously not stocks. Notwithstanding this, Dr. Hartzmark also examines “whether the 7.6[0] % Note[s] prices reacted to the alleged corrective disclosures in a way that is consistent with what would be expected of a **stock** that trades in an efficient market.”<sup>207</sup> [emphasis added] He concludes that “generally, all three disclosures with potential impacts have the expected statistically significant price responses.”<sup>208</sup>

167. To reach these conclusions, in part, Dr. Hartzmark conducts an event study analysis which yields an estimate of the “abnormal return” for the 7.60% Notes on each of the six dates (March 14, 2013; March 15, 2016; October 31, 2016; June 16, 2017; June 19, 2017; and July 12, 2017). There are two primary problems with his event study method for the bond price analysis, which are described below.

**168. Calculation of Prices and Returns Incorporating “Before” and “After”**

**Disclosures:** Dr. Hartzmark’s methodology for calculating average daily bond prices (from which returns are calculated) on days on which unexpected news was disclosed in the middle of the trading day is *ad hoc* and flawed, which results in measures of daily bond price returns that are themselves incorrect.<sup>209</sup> As I show below, since daily bond returns are a key input in the bond event study model, inaccurate estimates of raw returns on key disclosure dates will yield

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<sup>206</sup> Hartzmark Report, p. 72.

<sup>207</sup> Hartzmark Report, p. 78.

<sup>208</sup> Hartzmark Report, p. 78.

<sup>209</sup> Daily bond returns are simply the percentage change in daily bond prices.

inaccurate estimates of abnormal return or, equivalently, of price inflation that is attributed to alleged misstatements or omissions.

169. **Industry Index Used:** Dr. Hartzmark includes two equity indices in his bond study (*i.e.*, one overall market index and one industry-specific index). While combining equity-based indices and bond prices has its own challenges, my previous discussion showed that, at a minimum, his industry index SPTCR50 should be replaced with the superior DJSTEL industry index.

**A. Dr. Hartzmark’s Measurement Method for “Before” and “After” Daily Price Changes on Disclosure Days is Flawed and Biases the Results**

170. One notable feature of bond markets, as Dr. Hartzmark acknowledges, is that bonds, on average, trade less frequently than stock.<sup>210</sup> With only a few (and sometimes no) trades each day, a bond’s last trade price at the end of the trading session may not be representative of the value of the bond at a different point in time. Therefore, instead of using the closing price to calculate daily returns, as is typically done in equity event studies that rely on daily market data, academic research recommends the use of daily average transaction prices that are weighted by trade size, also known as volume weighted average prices (“VWAP”).<sup>211</sup> The calculation of VWAP is straightforward, but when unexpected new information arrives in the middle of a trading day (“mid-day disclosures”), VWAP calculations require greater care. As Dr. Hartzmark

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<sup>210</sup> Hartzmark Report, pp. 52–53.

<sup>211</sup> Bessembinder, Kahle, Maxwell, and Xu (2009), a well-regarded study on bond event study methodology, recommends the following practices for improving the power of the tests in TRACE-based event studies: (1) calculate bond returns from average daily trade prices where each transaction price is weighted by trade size (VWAP), (2) exclude trades of less than \$100,000 par value when calculating average daily prices, (3) calculate abnormal bond returns using value-weighted rating/maturity benchmarks, and (4) combine returns on a firm’s bonds into a single firm return. *See* Bessembinder, H., K.M. Kahle, W. F. Maxwell, and D. Xu. 2009. Measuring abnormal bond performance. *Review of Financial Studies* 22 (“Bessembinder et al. 2009”), 4219–58.

himself notes: “[W]hen disclosures are made in the middle of the trading day, VWAP combines transactions from both before and after the disclosure. Thus, when examining cause-and-effect, this can affect the empirical results.”<sup>212</sup> In such cases, assuming informationally efficient markets (as Dr. Hartzmark argues is the case for CenturyLink’s 7.60% Notes), the researcher cannot calculate pre-disclosure or post-disclosure VWAP as the weighted average price for *all* transactions on the date of the disclosure. The transaction prices prior to the disclosure have not impounded the new information whereas, assuming market efficiency, the transactions prices after the disclosure likely have. Nor is such an assumption necessary, as data on bond prices and trading dates have time stamps that allow one to parse disclosure days into relevant periods for calculation of VWAP.

171. Of the three alleged curative disclosure dates, the Complaint identifies a specific curative disclosure and its timing only for two dates, June 16, 2017 and July 12, 2017.<sup>213</sup> The two mid-day disclosures occur around 1:50 PM (June 16, 2017) and 12:04 PM (July 12, 2017).<sup>214</sup> Dr. Hartzmark’s VWAP measurement problems relate to how he treats the mid-day arrival of information. For the June 16, 2017 mid-day disclosure, Dr. Hartzmark considers the full day of June 16 to be the pre-announcement or pre-disclosure date and calculates VWAP using *all* transactions on June 16, 2017 between 9:30 AM and 4:00 PM. In contrast, I calculate the pre-announcement price as the weighted average price from all transactions on June 15, 2017 plus

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<sup>212</sup> Hartzmark Report, pp. 68–69=. Dr. Hartzmark considers the disclosure day as the pre-announcement day if a majority of the bond transactions (in terms of aggregate par value traded) take place before the arrival of the new information. *See also* Hartzmark Report, Exhibit 21, notes [A] and [B].

<sup>213</sup> The third date, June 19, 2017, had an announcement over the weekend between a Friday and Monday and had several other disclosures through the trading day on Monday. I consider the VWAP based on all transactions over June 19, 2017 as the post-disclosure price.

<sup>214</sup> Hartzmark Report, p. 79.

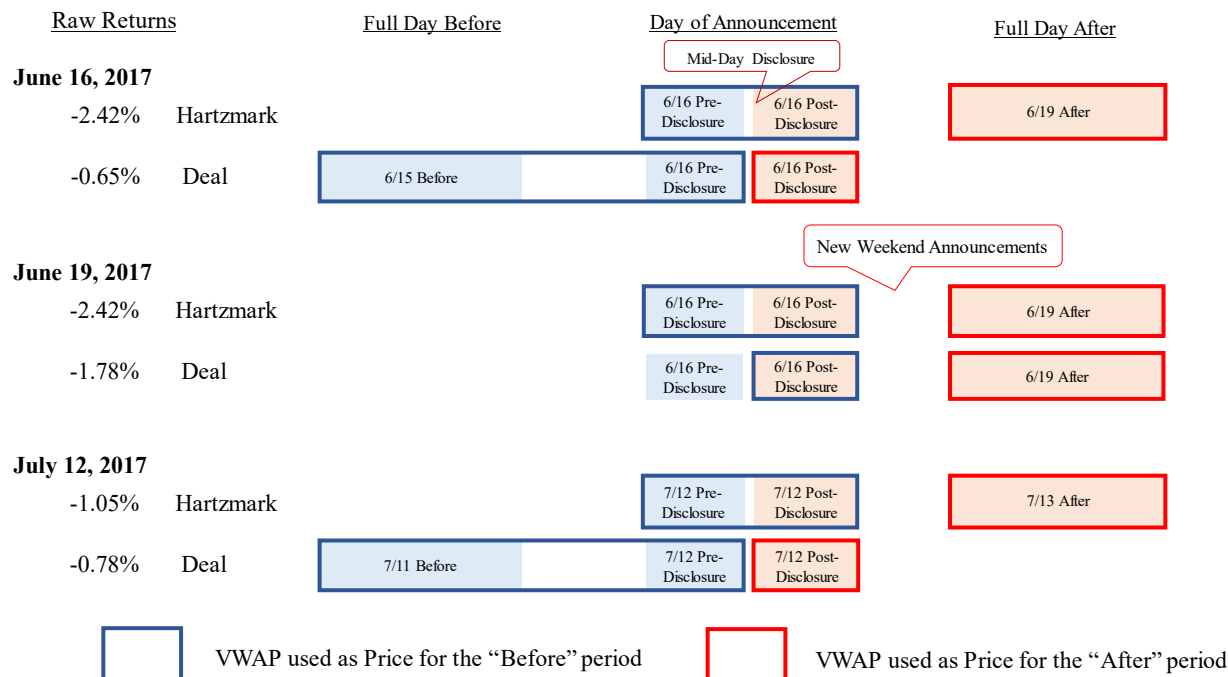
the transactions from June 16 that took place prior to the disclosure.<sup>215</sup> The remaining transactions on June 16, 2017 till market close at 4:00 PM contribute to the post-disclosure VWAP. I follow the same approach for all disclosure days with mid-day disclosures.

172. Dr. Hartzmark's approach for July 12, 2017 is identical to the one for June 16, 2017; that is, he effectively treats all July 12 transaction prices as pre-disclosure prices. **Exhibit 33** summarizes Dr. Hartzmark's and my approach towards VWAP calculation on specific disclosure days. The figure below illustrates the approaches used for the "before and after" periods for the three alleged disclosure days. As one can see, I parse the disclosure day into pre-disclosure and post-disclosure components, whereas Dr. Hartzmark often has either a pre-disclosure or post-disclosure period that is a mix of actual pre-disclosure and post-disclosure trades.

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<sup>215</sup> For disclosures made mid-day, I have also considered the weighted average of all prices prior to the disclosure versus the weighted average of prices after the disclosure on the same day as the before and after prices for cause and effect analysis.

**Figure 13**  
**Illustration of Before and After Time Periods Used for Alleged Corrective Disclosure Dates**



173. Dr. Hartzmark also examines the price impact of three ratings downgrades for the 7.60% Notes that were announced during the Class Period.<sup>216</sup> For two of the dates on which such downgrades were announced, March 14, 2013 and October 31, 2016, he considers the VWAP based on all transactions that day as the *post*-announcement price (different from what he did for the two dates discussed in the previous paragraphs).<sup>217</sup> In contrast, I consistently calculate pre-announcement prices based on transactions on the day prior to the disclosure day *plus*

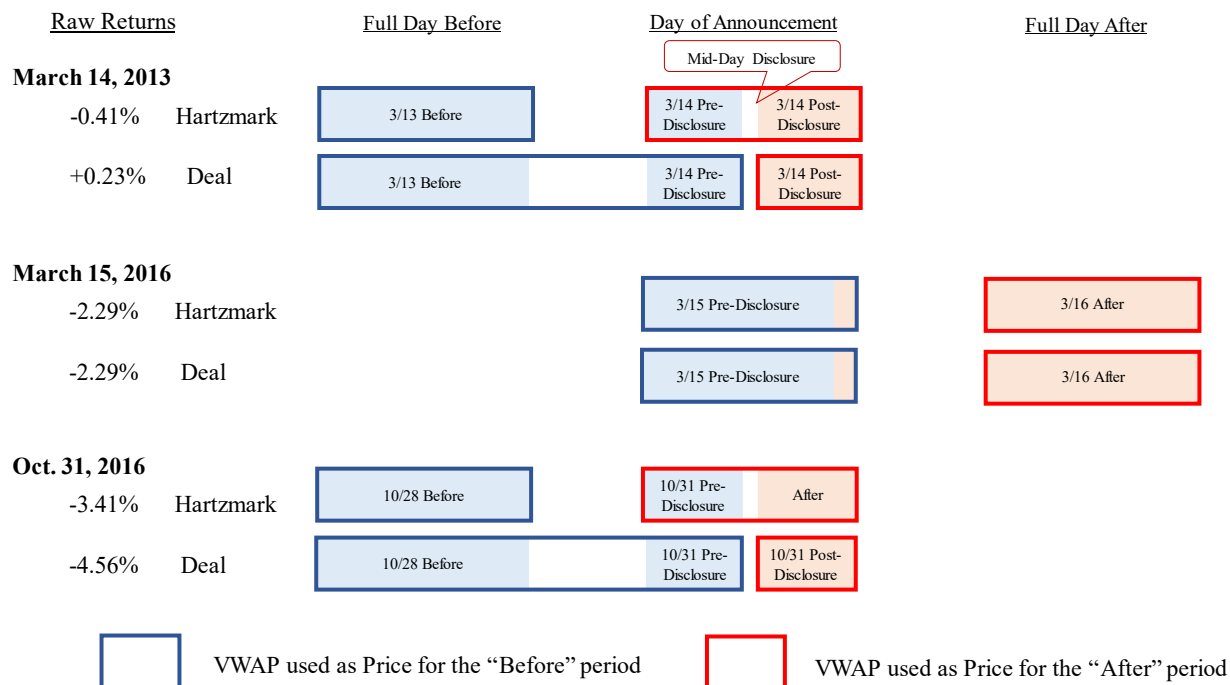
<sup>216</sup> On March 14, 2013, Moody’s downgraded the 7.60% Notes to Ba2, with the announcement coming at 11:07 AM. On March 15, 2016, Moody’s further downgraded the 7.60% Notes to Ba3, with the announcement coming at 3:45 PM. Finally, on October 31, 2016, S&P, Fitch, and Moody’s all put the 7.60% Notes on negative credit watch, with the announcements coming at 12:14 PM, 2:42 PM and 2:54 PM, respectively. Hartzmark Report, pp. 68, 70–72.

<sup>217</sup> Dr. Hartzmark’s report considers the disclosure day as the post-announcement day if a majority of the bond transactions (in terms of aggregate par value traded) take place before the arrival of the new information. *See* Hartzmark Report and work papers.



transactions before the announcement on the disclosure day. The figure below illustrates our respective approaches:

**Figure 14**  
**Illustration of Before and After Time Periods Used for Bond Downgrade Dates**



174. The downgrade announcement on March 15, 2016 came close to the end of the trading day, and there were no trades following the disclosure before the end of the trading day. Both Dr. Hartzmark and I treat this day as the pre-disclosure day.

175. **Exhibit 34** and the figure above summarize the daily returns calculated using Dr. Hartzmark’s method and my method for calculating VWAP. A comparison of 1-day raw returns (*i.e.*, percentage change in daily VWAP) shows that Dr. Hartzmark’s *ad hoc* approach results in larger daily returns (in absolute terms) on all corrective disclosure days, as compared to my consistent approach to identifying pre- and post-announcement prices. For instance, for the June 16, 2017 alleged curative disclosure, 1-day raw returns are -2.42 percent with Dr. Hartzmark’s approach versus -0.65 percent with mine. For the June 19, 2017 alleged corrective disclosure, 1-

day raw returns are -2.42 percent with Dr. Hartzmark's approach versus -1.78 percent with mine. For the July 12, 2017 alleged curative disclosure, 1-day raw returns are -1.05 percent with Dr. Hartzmark's approach versus -0.78 percent with mine. In addition, the analysis of ratings downgrades finds that for March 14, 2013, the Deal Raw Returns actually have a positive, rather than a negative, sign.

176. In the next section, I use the Deal Raw Returns, rather than the Hartzmark Raw Returns, to estimate the bond event study model and calculate abnormal returns on key disclosure days, after also correcting for the industry index.

#### **B. Dr. Hartzmark's Bond Event Study Model for Measuring Abnormal Returns is Flawed**

177. Similar to an equity price event study, a bond price event study is designed to isolate the impact of an event on the value of a bond by excluding the impact of other factors that also affect bond value. In designing a bond market event study, a researcher confronts certain issues that are distinct from issues that are relevant for equity event studies. This point was highlighted in a comprehensive review of bond event study methodologies, which noted that, "[t]he methodology utilized for stocks cannot simply be applied to bonds, as bonds present several features that strongly distinguish them from stocks. An erroneous model could lead to false conclusions about the impact of new information on a firm's debt."<sup>218</sup>

178. Like he does for the equity event study, Dr. Hartzmark uses a market index and an industry index. Dr. Hartzmark's bond event study model uses:

*a slightly different specification of the regression model [as compared to his equity event study]. As with a single-issuer common*

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<sup>218</sup> Maul, D. and D. Schiereck., "The bond event study methodology since 1974," *Review of Quantitative Finance and Accounting*, 2017, 48: 749–87 ("Maul and Schiereck 2017"), p. 749.

*stock, this approach uses a so-called market model to partition a single company's bond price movement on each trading day into various components. ... [T]o run the market model I add explanatory variables to the market model specification used for CenturyLink's common stock that account for these two other exogenous factors.*<sup>219</sup>

179. The two exogenous factors that Dr. Hartzmark adds to the market model specification are default risk and “daily return of a treasury security with the same time-to-maturity.”<sup>220</sup> Academic research has documented that, as compared to other models, the use of either single factor or multi-factor market model has less power to detect abnormal performance when such abnormal performance is in fact present.<sup>221</sup>

180. To illustrate the sensitivity of Dr. Hartzmark's bond model's abnormal returns to model and VWAP choices, I make the two adjustments to his analysis noted above. First, I adjust the calculation of daily returns using the VWAP method discussed above. Second, I replace the industry index in his model with the DJSTEL index, which I also used in the equity event study model. With just these two modest adjustments, the abnormal returns on the six dates are markedly different from those calculated by Dr. Hartzmark. (See **Exhibit 34.**) The figure below summarizes the abnormal returns calculated using the Hartzmark Model and the Deal Model.

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<sup>219</sup> Hartzmark Report, pp. 65–66.

<sup>220</sup> Hartzmark Report, pp. 66–67.

<sup>221</sup> Maul and Schiereck 2017 say that, “While the market model provides an elaborated procedure to measure abnormal returns for stockholders ... its application to bond event studies contains several empirical issues. One issue is the potential non-stationarity of the beta coefficient. Elton et al. (2011) discuss the application of the single-index model to bonds and argue that the bond beta equals the ratio of the duration of the bond and the duration of the index. On this basis, the beta decreases with time and the decrease becomes steeper as the bond approaches maturity.” Maul and Schiereck 2017, p. 769. Bessembinder et al. 2009, using the term “factor model” for multi-factor market models similar to the one used by Dr. Hartzmark, find “significant problems when using the Lehman index and the FF [Fama French] factor model to construct abnormal bond returns, for both the investment grade and the noninvestment grade samples. ... The standard deviation of monthly excess returns is much larger for the factor models than for the other approaches, in both the investment grade and noninvestment grade samples. This suggests that the factor-based approaches will have less power to detect abnormal performance when it is in fact present.” Bessembinder et al. 2009, pp. 4236–4237.

**Figure 15**  
**Summary of 7.60% Notes Event Study Abnormal Returns for**  
**Three Alleged Curative Disclosure Dates and Three Bond Rating Downgrade Dates**

	Disclosure Date			Downgrade Date		
	16-Jun-17	19-Jun-17	12-Jul-17	14-Mar-13	16-Mar-16	31-Oct-16
	[A]	[B]	[C]	[D]	[E]	[F]
<b>Abnormal Return (AR):</b>						
• Hartzmark						
1-day AR	-2.65%	-2.46%	-1.22%	-0.28%	-2.42%	-2.80%
<i>t</i> -stat	(-4.42)	(-4.10)	(-2.16)	(-0.30)	(-1.91)	(-2.97)
2-day Cumulative AR		-5.05%		-0.24%	-4.18%	-5.99%
<i>t</i> -stat		(-6.02)		(-0.18)	(-2.35)	(-4.56)
• Deal						
AR	-0.65%	-1.99%	-1.21%	0.33%	-2.39%	-3.78%
<i>t</i> -stat	(-1.09)	(-3.20)	(-2.00)	(0.35)	(-1.89)	(-3.93)

181. Overall, the magnitude of the negative abnormal returns is smaller for the alleged curative disclosure dates when using the Deal Model. In fact, on one of the three alleged curative disclosure days, June 16, 2017 (column A in the figure above), I obtain abnormal returns that are not statistically significantly different from zero whereas, using his *ad hoc* and flawed methodology, Dr. Hartzmark calculates an abnormal return of -2.65 percent, which is highly statistically significant.

182. Similarly, when using my methodology, abnormal returns are significant at conventional levels (with 95 percent confidence) for only one of the three ratings downgrade dates, October 31, 2016, when all three ratings agencies downgraded the 7.6% Note (columns D and F in **Figure 15** above). Dr. Hartzmark also finds statistically significant negative returns on only one of the days (-2.8 percent on October 31, 2016, column F). While this analysis of bond downgrade days undermines Dr. Hartzmark's conclusion of bond market efficiency for the 7.60% Notes, I do not conclude that there is a sufficient basis to determine that the 7.60% Notes do not trade in an efficient market.

183. For each of the disclosures, Dr. Hartzmark also measures returns over multiple days, an approach that I consider inappropriate in this context. If, as Dr. Hartzmark argues in his report, the market for CenturyLink's 7.60% Note is efficient<sup>222</sup> with adequate liquidity and a substantial fraction of traders that are sophisticated, then it should not take several days for new information to be processed by the market. It is noteworthy that he does not raise the issue of complexity of information when discussing equity market reaction to the same information.

184. In summary, I find that Dr. Hartzmark's bond price event study method is flawed, and corrections eliminate one of the alleged corrective disclosure dates. In addition, the same critiques raised in the discussion of equity prices regarding his assumption of the Complaint's allegations being accurate and his corresponding assumption that a common method for damages calculations can be used, also apply in this context.

## VIII. CONCLUSION

185. Dr. Hartzmark has done no economic analysis regarding the reasonableness of his assumption that all of Plaintiffs' allegations of inflation and curative disclosures in the Complaint are true. He simply assumes this to be the case. The actual substantive analysis he did was focused on market efficiency for CenturyLink's equity and 7.60% Notes and the development of an event study for measuring abnormal returns for each. I agree with his market efficiency findings, but find flaws with his event study methodology for equities and for bonds, which have a material effect on his estimates. For CenturyLink's equity, the June 19, 2017 date does not have statistically significant abnormal returns. For the 7.60% Notes, the June 16, 2017 date does not have statistically significant abnormal returns.

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<sup>222</sup> Hartzmark Report, p. 6.

186. Dr. Hartzmark's opinion regarding common methods for determining damages is simplistic and uninformative, and he fails to consider anything regarding the economic substance or context of Plaintiffs' specific allegations in this particular case. He essentially states that someone (not him, apparently) could develop an inflation "ribbon" over time. The ribbon would need to incorporate the complexity of the allegations in this Action:

- It would need to be **scaled** to vary over time based on the 52 market days potentially impacted by the alleged inflationary misstatements (each of which would need to be **parsed** to separate non-fraud information from allegedly fraudulent information);
- It would need to be **further scaled** to account for the alleged "low cramming" period in the middle of Class Period;
- It would need to be **parsed** to account for the five different categories of alleged misrepresentations, any one of which might be found to not be fraud;
- It would need to be **scaled** to vary across the two remaining (after eliminating those not statistically significant and negative) alleged corrective disclosure dates;
- It would need to **account for** the FUD affecting stock and bond prices vs. any truth to the allegations in the lawsuits and investigations, including any material resolution, findings, or expected material impact on future cash flows,

187. Dr. Hartzmark has done nothing to support or describe his assertion that one or more inflation ribbons can be developed in this Action given these facts and these allegations. His "common method" appears to simply be subtraction, meaning that one can compare inflation at purchase and inflation at sale and see if there is a difference, having made the huge assumption that a common inflation ribbon or ribbons can be developed by someone that accurately reflects the combination of allegations in this matter.

188. Just because in much simpler cases with simpler facts it may be possible to describe how to develop a common method for calculating damages does *not* mean that is true for every such matter. And certainly with the complex set of allegations present in this Action,

simply stating that it will be done later is insufficient, based on my decades of working on class action matters of all types, and securities class actions in particular.

189. I further find that the economic framework around these allegations is not supportive of an untested assumption that, effectively, everything in the Complaint is true. I find the inflation allegations to be so general as to be nearly meaningless. An initial review of the actual facts around the 52 alleged inflationary dates are not supportive of the allegations and are not supportive of an assumption that they represent inflationary statements due to widespread cramming and can thus be used for the development of a common damages calculation method.

190. Similarly, for the alleged corrective disclosures, Plaintiffs' allegations in this Action that news regarding additional lawsuits, which themselves contain unproven allegations, should be considered corrective disclosures with no additional testing or analysis is not economically reasonable, and is effectively circular and self-fulfilling. Dr. Hartzmark has done nothing to show that this assumption is based on a solid economic foundation. My own economic analysis finds that this assumption is not well founded, and that for this Action, assuming that stock price drops on two days with statistically significant declines where unproven lawsuits are announced is the basis for an allegation of a likely curative disclosure is not a sufficient economic basis for the determination of a common damages impact for the entire class.



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Bruce F. Deal

March 23, 2020

**EXHIBIT 18A**  
**ABNORMAL RETURNS FOLLOWING ALLEGED FALSE AND MISLEADING REVENUE-RELATED STATEMENTS**

	Announcement Date	Abnormal Return Measurement Date	Announcement Type	Volume	Price	CTL Return	Market Return	Industry Return	Predicted Return	Deal Model Abnormal Return	<i>t</i> -Statistic	<i>p</i> -Value	Deal Model Abnormal Price Move	Hartzmark Abnormal Return	Hartzmark Model Abnormal Price Move	Abnormal Return: Hartzmark less Deal	Abnormal Price Move: Hartzmark less Deal
	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]	[M]	[N]	[O]	[P] = [J]-[N]	[Q] = [M]-[O]
[1]	1-Mar-2013	1-Mar-2013	10-K	6,545,795	\$34.89	0.6%	0.2%	(0.4%)	(0.5%)	1.1%	0.51	0.61	\$0.39	0.4%	\$0.14	(0.7%)	(\$0.24)
[2]	8-May-2013	9-May-2013	Earnings Announcement	8,874,180	\$37.24	(0.2%)	(0.3%)	(0.6%)	(1.1%)	0.9%	0.44	0.66	\$0.35	0.4%	\$0.15	(0.5%)	(\$0.20)
[3]	10-May-2013	10-May-2013	10-Q	4,113,664	\$37.62	1.0%	0.4%	0.6%	1.0%	0.0%	0.01	0.99	\$0.01	0.6%	\$0.24	0.6%	\$0.23
[4]	7-Aug-2013	8-Aug-2013	Earnings Announcement	16,527,825	\$34.36	(5.6%)	0.4%	(0.5%)	0.2%	(5.8%)	<b>(7.09)</b>	0.00	(\$2.11)	(5.3%)	(\$1.94)	0.5%	\$0.17
[5]	8-Aug-2013	9-Aug-2013	10-Q	8,025,526	\$33.89	(1.4%)	(0.3%)	0.1%	(0.2%)	(1.1%)	(1.20)	0.23	(\$0.39)	(0.7%)	(\$0.23)	0.5%	\$0.16
[6]	6-Nov-2013	7-Nov-2013	Earnings Announcement	13,537,330	\$31.81	(6.1%)	(1.3%)	(0.7%)	(1.4%)	(4.7%)	<b>(4.66)</b>	0.00	(\$1.60)	(4.6%)	(\$1.56)	0.1%	\$0.04
[7]	7-Nov-2013*	8-Nov-2013	10-Q	10,077,843	\$31.33	(1.5%)	1.3%	(0.6%)	0.8%	(2.3%)	<b>(2.11)</b>	0.04	(\$0.74)	(1.9%)	(\$0.60)	0.4%	\$0.14
[8]	10-Dec-2013	10-Dec-2013	Investor Conference	6,332,872	\$31.51	(0.0%)	(0.3%)	(0.6%)	(0.7%)	0.7%	0.63	0.53	\$0.21	0.7%	\$0.21	(0.0%)	(\$0.00)
[9]	12-Feb-2014	13-Feb-2014	Earnings Announcement	12,193,083	\$30.77	1.9%	0.6%	1.0%	0.9%	1.0%	1.02	0.31	\$0.31	1.2%	\$0.37	0.2%	\$0.05
[10]	27-Feb-2014	27-Feb-2014	10-K	6,072,859	\$31.08	0.9%	0.5%	1.1%	0.8%	0.1%	0.07	0.94	\$0.02	(0.0%)	(\$0.01)	(0.1%)	(\$0.04)
[11]	7-May-2014	8-May-2014	Earnings Announcement	21,617,627	\$36.86	6.4%	(0.1%)	0.4%	0.0%	6.3%	<b>7.86</b>	0.00	\$2.20	6.0%	\$2.08	(0.3%)	(\$0.11)
[12]	8-May-2014*	9-May-2014	10-Q	7,794,610	\$36.56	(0.8%)	0.2%	0.9%	0.4%	(1.2%)	(1.19)	0.24	(\$0.44)	(1.0%)	(\$0.37)	0.2%	\$0.07
[13]	12-Jun-2014	12-Jun-2014	Investor Conference	2,960,166	\$36.39	(0.1%)	(0.7%)	0.0%	(0.3%)	0.2%	0.16	0.87	\$0.06	0.2%	\$0.08	0.0%	\$0.02
[14]	6-Aug-2014	7-Aug-2014	Earnings Announcement	4,882,082	\$38.95	0.5%	(0.5%)	(0.4%)	(0.1%)	0.6%	0.59	0.55	\$0.24	0.9%	\$0.35	0.3%	\$0.11
	7-Aug-2014	7-Aug-2014	10-Q														
[15]	5-Nov-2014	6-Nov-2014	Earnings Announcement	8,155,493	\$39.00	(6.4%)	0.4%	(1.4%)	(0.5%)	(5.8%)	<b>(6.45)</b>	0.00	(\$2.42)	(5.9%)	(\$2.46)	(0.1%)	(\$0.03)
[16]	6-Nov-2014	7-Nov-2014	10-Q	6,073,176	\$39.43	1.1%	0.1%	0.9%	0.7%	0.4%	0.34	0.73	\$0.14	0.2%	\$0.08	(0.2%)	(\$0.06)
[17]	11-Feb-2015	12-Feb-2015	Earnings Announcement	12,709,861	\$39.29	(3.0%)	1.0%	(0.1%)	0.6%	(3.7%)	<b>(3.47)</b>	0.00	(\$1.49)	(3.5%)	(\$1.40)	0.2%	\$0.08
[18]	24-Feb-2015	25-Feb-2015	10-K	3,045,561	\$37.30	0.6%	(0.1%)	1.3%	1.0%	(0.4%)	(0.29)	0.77	(\$0.13)	0.5%	\$0.20	0.9%	\$0.33
[19]	9-Mar-2015	9-Mar-2015	Investor Conference	3,639,731	\$35.23	(0.5%)	0.4%	(0.1%)	0.1%	(0.7%)	(0.59)	0.56	(\$0.24)	(0.5%)	(\$0.17)	0.2%	\$0.07
[20]	5-May-2015	6-May-2015	Earnings Announcement	9,386,969	\$34.53	(2.8%)	(0.4%)	(0.9%)	(1.1%)	(1.7%)	(1.46)	0.15	(\$0.59)	(1.9%)	(\$0.69)	(0.3%)	(\$0.09)
[21]	6-May-2015	7-May-2015	10-Q	3,863,268	\$34.65	0.3%	0.4%	(0.9%)	(0.6%)	1.0%	0.85	0.39	\$0.34	0.3%	\$0.10	(0.7%)	(\$0.24)
[22]	5-Aug-2015	6-Aug-2015	Earnings Announcement	13,508,550	\$27.93	(2.2%)	(0.7%)	0.5%	(0.5%)	(1.7%)	(1.43)	0.16	(\$0.49)	(1.4%)	(\$0.41)	0.3%	\$0.07
	6-Aug-2015	6-Aug-2015	10-Q														
[23]	4-Nov-2015	5-Nov-2015	Earnings Announcement	7,444,523	\$28.71	2.5%	(0.1%)	(0.7%)	(0.7%)	3.1%	<b>2.73</b>	0.01	\$0.88	2.8%	\$0.78	(0.3%)	(\$0.09)
[24]	5-Nov-2015	6-Nov-2015	10-Q	5,289,408	\$28.57	(0.5%)	(0.0%)	0.1%	(0.1%)	(0.4%)	(0.36)	0.72	(\$0.12)	0.2%	\$0.06	0.6%	\$0.18
[25]	7-Dec-2015	7-Dec-2015	Investor Conference	5,394,426	\$27.13	1.6%	(0.7%)	0.1%	(0.8%)	2.4%	<b>1.98</b>	0.05	\$0.64	1.7%	\$0.44	(0.7%)	(\$0.20)
[26]	10-Feb-2016	11-Feb-2016	Earnings Announcement	15,041,048	\$27.29	11.0%	(1.2%)	1.8%	0.3%	10.7%	<b>8.44</b>	0.00	\$2.62	12.4%	\$3.04	1.7%	\$0.42
[27]	24-Feb-2016*	25-Feb-2016	10-K	4,701,352	\$30.41	1.3%	1.2%	(0.5%)	0.8%	0.6%	0.36	0.72	\$0.17	0.3%	\$0.09	(0.3%)	(\$0.09)
[28]	4-May-2016	5-May-2016	Earnings Announcement	20,521,476	\$28.20	(8.9%)	0.0%	(1.9%)	(2.1%)	(6.8%)	<b>(4.21)</b>	0.00	(\$2.10)	(8.6%)	(\$2.65)	(1.8%)	(\$0.55)
	5-May-2016	5-May-2016	10-Q														
[29]	3-Aug-2016	4-Aug-2016	Earnings Announcement	8,008,621	\$30.25	(0.9%)	0.0%	(0.2%)	(0.1%)	(0.8%)	(0.59)	0.56	(\$0.23)	(0.8%)	(\$0.25)	(0.1%)	(\$0.02)
[30]	4-Aug-2016	5-Aug-2016	10-Q	4,790,409	\$29.88	(1.2%)	0.9%	(1.6%)	(0.1%)	(1.1%)	(0.83)	0.41	(\$0.33)	(1.8%)	(\$0.55)	(0.8%)	(\$0.23)
[31]	31-Oct-2016	31-Oct-2016	Earnings Announcement	71,943,608	\$26.58	(12.5%)	(0.0%)	0.2%	0.2%	(12.7%)	<b>(9.82)</b>	0.00	(\$3.86)	(12.9%)	(\$3.91)	(0.1%)	(\$0.04)
[32]	4-Nov-2016	4-Nov-2016	10-Q	21,633,402	\$23.05	0.2%	(0.2%)	1.4%	0.6%	(0.4%)	(0.21)	0.84	(\$0.09)	0.3%	\$0.07	0.7%	\$0.15
[33]	8-Feb-2017	9-Feb-2017	Earnings Announcement	10,179,851	\$24.42	(0.0%)	0.6%	0.1%	0.5%	(0.6%)	(0.30)	0.76	(\$0.14)	(0.6%)	(\$0.16)	(0.1%)	(\$0.02)
[34]	22-Feb-2017*	23-Feb-2017	10-K	6,597,988	\$24.71	(0.5%)	0.1%	(1.2%)	(1.1%)	0.6%	0.31	0.76	\$0.14	(1.0%)	(\$0.25)	(1.6%)	(\$0.39)
[35]	3-May-2017	4-May-2017	Earnings Call	28,643,399	\$23.74	(6.6%)	0.1%	(2.0%)	(1.4%)	(5.2%)	<b>(5.37)</b>	0.00	(\$1.33)	(6.2%)	(\$1.57)	(0.9%)	(\$0.23)
Total	38	35															

*Certain rows show no data if the Abnormal Return Measurement Date is the same as in the row above.*



**EXHIBIT 18A**  
**ABNORMAL RETURNS FOLLOWING ALLEGED FALSE AND MISLEADING REVENUE-RELATED STATEMENTS**

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**Notes and Sources:**

All regression results are based on the Deal Model as described in Exhibit 26B.

[A] Announcement Dates for SEC filings and earnings announcements are based on information from SEC EDGAR. Announcement dates for investor conferences are from the Complaint, Appendix A.

\* For these events, the filing dates on SEC EDGAR differ from the dates listed in the Complaint, Appendix A. The table shows dates from SEC EDGAR.

[B] When announcements are made after close of market, the Abnormal Return Measurement Date is the trading day after the Announcement Date.

[C] From Complaint, Appendix A.

[D]-[G] From Bloomberg. [G] shows the daily returns on the market index, which is the S&P 500 Index.

[H] Excess industry returns are residuals from a regression of the daily returns DJSTEL index on the daily returns of the market index (S&P500). See Exhibit 26B.

[I] Predicted returns are from an estimation of the Deal Model as described in Exhibit 26B.

[J] = [F] - [H]. Difference of realized CTL return and predicted CTL return using Deal regression model.

[K]  $t$ -statistic from a test that the abnormal return is equal to zero against a two-sided alternative. Bolded values denote statistical significance at 5% level or less ( $t$  greater than about 1.96).

[L]  $p$ -value associated with  $t$ -test in [L].

[M] Deal Model abnormal return times previous day's closing price.

[N], [O] From Hartzmark Report, Appendix C.

**EXHIBIT 18B**  
**ABNORMAL RETURNS FOLLOWING ALLEGED FALSE AND MISLEADING NON-REVENUE-RELATED STATEMENTS**

		Abnormal Return						Excess		Deal			Deal		Abnormal	Abnormal	
Announcement Date	Measurement Date				CTL Return	Market Return	Industry Return	Predicted Return	Model				Model	Hartzmark	Hartzmark	Abnormal	
		Announcement Type	Volume	Price					Abnormal Return	<i>t</i> -Statistic	<i>p</i> -Value	Abnormal Price Move	Abnormal Return	Abnormal Price Move	Hartzmark less Deal	Price Move: Hartzmark less Deal	
[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]	[K]	[L]	[M]	[N]	[O]	[P] = [N]-[J]	[Q] = [O]-[M]	
[1]	10-Apr-2013	10-Apr-2013	SEC Form DEF 14A	5,814,105	\$36.95	1.7%	1.2%	1.4%	2.6%	(0.9%)	(0.41)	0.69	(\$0.34)	0.6%	\$0.23	1.6%	\$0.56
[2]	16-Apr-2014	16-Apr-2014	SEC Form DEF 14A	4,915,918	\$34.74	2.0%	1.1%	0.2%	0.8%	1.2%	1.21	0.23	\$0.40	1.2%	\$0.42	0.1%	\$0.02
[3]	9-Mar-2015	9-Mar-2015	Investor Conference	3,639,731	\$35.23	(0.5%)	0.4%	(0.1%)	0.1%	(0.7%)	(0.59)	0.56	(\$0.24)	(0.5%)	(\$0.17)	0.2%	\$0.07
[4]	8-Apr-2015	8-Apr-2015	SEC Form DEF 14A	3,214,111	\$35.50	0.3%	0.3%	(0.5%)	(0.4%)	0.7%	0.57	0.57	\$0.24	(0.1%)	(\$0.02)	(0.7%)	(\$0.26)
[5]	4-Jun-2015	4-Jun-2015	Investor Conference	4,776,906	\$32.83	(0.5%)	(0.9%)	(0.1%)	(0.8%)	0.3%	0.30	0.76	\$0.11	0.4%	\$0.13	0.0%	\$0.01
[6]	24-Jun-2015	24-Jun-2015	Financial Analyst Day	11,369,663	\$31.88	(2.1%)	(0.7%)	(0.3%)	(0.8%)	(1.3%)	(1.11)	0.27	(\$0.41)	(1.4%)	(\$0.44)	(0.1%)	(\$0.04)
[7]	12-Aug-2015	12-Aug-2015	Oppenheimer Conference	5,320,177	\$28.53	1.0%	0.1%	(0.6%)	(0.5%)	1.5%	1.29	0.20	\$0.43	1.5%	\$0.43	0.0%	\$0.00
[8]	22-Sep-2015	22-Sep-2015	Response Letter to the SEC	5,241,863	\$25.38	(1.9%)	(1.2%)	(0.2%)	(1.6%)	(0.3%)	(0.28)	0.78	(\$0.08)	(0.5%)	(\$0.12)	(0.1%)	(\$0.03)
[9]	7-Mar-2016	7-Mar-2016	Investor Conference	5,096,593	\$31.77	0.6%	0.1%	0.5%	0.9%	(0.3%)	(0.19)	0.85	(\$0.10)	(0.2%)	(\$0.06)	0.1%	\$0.04
[10]	5-Apr-2016	6-Apr-2016	SEC Form DEF 14A	3,832,591	\$32.49	1.2%	1.1%	(0.7%)	0.5%	0.7%	0.43	0.67	\$0.22	0.7%	\$0.23	0.0%	\$0.01
[11]	6-Apr-2016	7-Apr-2016	AZ Assurance of Discontinuance	5,704,504	\$31.87	(1.9%)	(1.2%)	(0.1%)	(1.2%)	(0.8%)	(0.47)	0.64	(\$0.25)	0.1%	\$0.05	0.9%	\$0.29
[12]	21-Sep-2016	21-Sep-2016	Goldman Sachs Conference	4,296,810	\$26.92	0.6%	1.1%	(0.5%)	0.7%	(0.1%)	(0.07)	0.94	(\$0.02)	(0.8%)	(\$0.20)	(0.7%)	(\$0.18)
[13]	6-Oct-2016	6-Oct-2016	Statement to News Source	3,531,399	\$26.97	(0.2%)	0.1%	(0.7%)	(0.5%)	0.3%	0.25	0.80	\$0.08	(0.2%)	(\$0.04)	(0.5%)	(\$0.13)
[14]	18-Oct-2016	18-Oct-2016	Statement to News Source	3,770,437	\$27.90	1.9%	0.6%	0.0%	0.5%	1.4%	1.13	0.26	\$0.38	1.5%	\$0.40	0.1%	\$0.01
[15]	27-Jan-2017	30-Jan-2017	Statement to News Source	4,880,701	\$25.81	(0.6%)	(0.6%)	(0.1%)	(0.8%)	0.2%	0.10	0.92	\$0.05	(0.0%)	(\$0.01)	(0.2%)	(\$0.06)
[16]	1-Feb-2017	2-Feb-2017	Statement to News Source	6,190,566	\$25.26	(1.0%)	0.1%	(1.0%)	(0.9%)	(0.1%)	(0.04)	0.97	(\$0.02)	(0.3%)	(\$0.08)	(0.2%)	(\$0.06)
[17]	13-Apr-2017	13-Apr-2017	SEC Form DEF 14A	9,958,699	\$25.12	(0.1%)	(0.7%)	(0.0%)	(1.1%)	1.0%	0.55	0.58	\$0.26	1.0%	\$0.26	(0.0%)	(\$0.00)
[18]	25-May-2017	25-May-2017	Statement to News Source	5,796,190	\$24.93	(0.1%)	0.5%	(0.0%)	0.5%	(0.6%)	(0.53)	0.60	(\$0.14)	(0.8%)	(\$0.19)	(0.2%)	(\$0.04)

**Notes and Sources:**

- [1] See Exhibit 18A for variable definitions.  
[2] Details on the specific statements and sources associated with each announcement listed in column [C] are in Exhibit 18C.

# Exhibit 9

**UNITED STATES DISTRICT COURT  
DISTRICT OF MINNESOTA**

IN RE: CENTURYLINK SALES  
PRACTICES AND SECURITIES  
LITIGATION

MDL No. 17-2795 (MJD/KMM)

**Reply Expert Report of Michael L. Hartzmark, Ph.D.**

**May 4, 2020**

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## I. QUALIFICATIONS AND COMPENSATION

1. I am President of Hartzmark Economics Litigation Practice, LLC. My qualifications and remuneration for this matter are set forth in my Expert Report dated January 21, 2020 (the “Hartzmark Report” or “Opening Report”).<sup>1</sup>

## II. SUMMARY OF OPINIONS

### A. Opinions I Continue to Maintain From my Opening Report

2. I have reviewed the Expert Report of Bruce Deal dated March 23, 2020 (the “Deal Report”)<sup>2</sup> and maintain the opinions set forth in my Opening Report,<sup>3</sup> namely:

**OPINION 1:** Throughout the Class Period (March 1, 2013 through July 12, 2017),<sup>4</sup> CenturyLink, Inc. (“CenturyLink” or the “Company”) common stock and 7.60% Senior Notes due September 15, 2039 (the “7.6% Note”) traded in efficient markets.<sup>5</sup>

**OPINION 2:** While I have not been asked to quantify actual damages, the calculations of damages for violations of Section 10(b) of the Exchange Act (and SEC Rule 10b-5) are subject to a common methodology and may be computed on a class-wide basis for both the common stock purchasers and the 7.6% Note purchasers.

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<sup>1</sup> An updated *curriculum vitae* is attached to this Reply Report as **Appendix A**. Hartzmark Economics Litigation Practice, LLC is being compensated at a rate of \$700 per hour for my work in this matter. My compensation is not contingent on the outcome of this case in any way.

<sup>2</sup> I have also reviewed a transcript to Mr. Deal’s deposition taken on April 24, 2020 (“Deal Tr.”).

<sup>3</sup> See Hartzmark Report, ¶10.

<sup>4</sup> Consolidated Securities Class Action Complaint dated June 25, 2018 (the “Complaint”), p. 2.

<sup>5</sup> In this Reply Report, I refer to the common stock and 7.6% Note collectively as the “CenturyLink Securities.”

B. Reply Opinions

3. Based on my review of Mr. Deal’s report and deposition testimony, I have the following additional opinions in response to the opinions Mr. Deal expresses.

**REPLY OPINION 1:** Damages can be calculated in this case using a common damages methodology tied to Plaintiffs’ theory of liability. Mr. Deal does not dispute that the out-of-pocket (“OOP”) damages methodology that I describe in my Opening Report is virtually a universal standard and the appropriate methodology for calculating class-wide damages for claims under Section 10(b) of the Exchange Act or that it applies in this case. As I explained, the major input into that OOP damages methodology is the inflation ribbon (*i.e.*, the daily level of artificial inflation in CenturyLink’s Securities during the Class Period) that will be applied class-wide to calculate individual investor OOP damages. Mr. Deal does not dispute that the inflation ribbon is common to the class.

**REPLY OPINION 2:** Mr. Deal’s report and deposition testimony concerning my common damages methodology essentially amounts to an argument that it will be challenging to construct the inflation ribbon that will be applied class-wide to calculate individual investor OOP damages. This is incorrect; there are numerous economic and statistical tools that can be used to assist the trier of fact in determining how to construct the inflation ribbon. Based on my experience and my discussions with Plaintiffs’ Counsel, my understanding is that Mr. Deal’s argument is irrelevant to class certification because issues concerning the construction of the inflation ribbon are issues that are common to the class.

**REPLY OPINION 3:** Mr. Deal’s report and related analyses do not demonstrate an absence of price impact. As his report and deposition testimony make clear, Mr. Deal was not engaged to demonstrate, nor does he, offer any opinion that there is a lack of price impact on the CenturyLink Securities’ prices from the misrepresentations and omissions alleged in the Complaint (hereinafter referred to in combination as “misstatements”). As demonstrated below, the analyses Mr. Deal does provide are insufficient to show that Defendants’ misstatements did not impact



the prices of the CenturyLink Securities. To the contrary, Mr. Deal's analyses support the opinion that there is no evidence of a lack of price impact.

### III. SUBJECTS ON WHICH MR. DEAL OFFERS NO DISPUTE

4. Before I discuss my responses to specific issues raised in the Deal Report, it is important to point out that there are a number of important subjects where Mr. Deal does not dispute the opinions presented in my Opening Report.

5. Mr. Deal does not dispute that CenturyLink common stock and the 7.6% Note traded in efficient markets. Indeed, Mr. Deal states: "I agree with [Hartzmark's] market efficiency findings ...."<sup>6</sup> Mr. Deal also testified as such.<sup>7</sup>

6. Mr. Deal does not dispute that the out-of-pocket ("OOP") damages methodology that I describe in my Opening Report is virtually a universal standard, "typically used" and the appropriate methodology for calculating class-wide damages for claims under Section 10(b) of the Exchange Act, or that it applies in this case. As explained in my Opening Report, I would calculate OOP damages by using the results of an event study along with, among other things, determinations of the factfinder and firm-specific information, to construct inflation ribbons (a time-series of daily artificial inflation for each of the CenturyLink Securities) that measure how much the alleged misstatements inflated the CenturyLink Securities' prices on each day during the Class Period.<sup>8</sup> I further explained that these inflation ribbons, along with the actual trading activity of the Class members, would be used as inputs into my common damages methodology (or formula) to calculate individual investor damages in a mechanical fashion.

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<sup>6</sup> Deal Report, ¶185.

<sup>7</sup> Deal Tr. 167:13-19 (emphasis added) ("Q. Mr. Deal, I'm correct in stating that you don't criticize Dr. Hartzmark's opinions regarding the efficiency of the market for ... stock or the 7.6 percent bonds, right? A. **I agree with that. I don't have any dispute with his conclusion** that they both traded in efficient markets.").

<sup>8</sup> As a financial economist, I generally would begin to estimate inflation by using an event study. Others, especially those who rely on the principles of accounting, might use alternative techniques to estimate inflation.

7. Consistent with the common damages methodology I opined can be applied class-wide, in his report Mr. Deal agrees that:

Economic harm results from the difference in per-share inflation for purchasers of the security.<sup>9</sup>

During the period between the false inflation and the corrective disclosure, shareholders who bought the stock and held through the corrective disclosure may have realized a loss caused by the false information, when they buy at a price that includes inflation and later sell or hold until the inflation decreases or is eliminated. The amount of inflation present in the stock price, if any, during the class period is often referred to as the “inflation ribbon.”<sup>10,11</sup>

8. Needless to say, these statements clearly summarize and are entirely consistent with the common damages methodology described in my Opening Report.<sup>12</sup> They also demonstrate that Mr. Deal and I agree that there are no individualized issues that emerge from the application of this common OOP damages methodology, and that the

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<sup>9</sup> Deal Report, ¶3.

<sup>10</sup> Deal Report, ¶5.

<sup>11</sup> Indeed, in his report Mr. Deal takes what he characterizes as a “classic” securities fraud case (Deal Report, ¶106) — which I assert is not divorced from this matter— and suggests damages can be calculated using the OOP methodology.

Mr Deal testified as such as well. Deal Tr. 215:20-216:20 (objection omitted) (“Q So let me take that. Whether or not the corrective disclosure dates involve disclosure of truly corrective information, actual corrective disclosures I think is the term you used, or were prompted by FUD, that issue is common to all class members, right? A If I understand your question, I think the answer is probably yes in the sense that with the out-of-pocket type measure, you are looking at the price of the security that’s faced by all investors. So whether or not there’s -- any of those are corrective disclosures or those price drops can be considered to be corrective disclosures, that’s a question about the impact on the price specific to the allegations in the lawsuit that will affect all investors. I think that’s your core question. I don’t think there’s, you know, one group of investors in, you know, California that are going to be differently affected by a group of investors in Pennsylvania. I’m using those obviously conceptually. I agree with that. I think that was your question.”).

<sup>12</sup> Hartzmark Report, Section X.

same methodology would be utilized whether damages were being calculated in a securities class action or an individual lawsuit.<sup>13</sup>

#### **IV. MR. DEAL’S OPINIONS ARE BASED UPON HIS INCORRECT UNDERSTANDING OF PLAINTIFFS’ AND DEFENDANTS’ BURDENS**

9. As discussed below, Mr. Deal’s primary criticisms of the opinions expressed in my Opening Report appear to be that my analyses do not prove price impact, and that I have not explicitly demonstrated how I would construct the inflation ribbons given the specific factual allegations at issue in this case.<sup>14</sup>

10. Mr. Deal’s assignment bears this out. In his deposition, Mr. Deal clarified the scope of his assignment to be:

[H]aving two parts to it. So the second part ... I’ve been asked to look at the specific statistical analysis that [Dr. Hartzmark] has done with regard to these event studies and abnormal return calculations ... my [first] assignment is broader there which is to say to both describe the economic analyses and the economic framework and damages framework that I understand to be

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<sup>13</sup> I have been engaged in numerous opt-out matters wherein the issues associated with damages primarily pertain to the construction of an inflation ribbon for the individual investor.

<sup>14</sup> Mr. Deal’s ambiguous terminology and critique do not suggest that the damages methodology is not commonly used and inappropriate, but instead Mr. Deal is really stating, and I agree, that to implement the out-of-pocket method in a loss causation or damages report certain common techniques will be used to measure daily levels of alleged inflation in the CenturyLink Securities’ prices throughout the proposed Class Period attributable to Plaintiffs’ theory of liability. Examples abound in his report. For example: “an articulation of how a common damages model will be developed” (¶6); “model capable of reliably measuring any common inflation” (¶7); “not articulated how a common model would allow for parsing and scaling of alleged inflation such that a common method could be used to calculate damages” (¶10); “neither the start, the end, nor the size of the inflation ribbon is subject to a common methodology that can be reliably computed on a class-wide basis” (¶32); “Dr. Hartzmark has not conducted any analysis to even plausibly parse the effect of the alleged misrepresentations or categories of misrepresentations from non-false information, which would be necessary to connect any statements to a common measure of damages or price inflation, nor has he outlined a methodology for doing so” (¶60) and many others. These are all issues associated with loss causation because they concern how much inflation was caused by the alleged fraud. For present purposes, I note that whatever techniques are used to calculate the inputs (*i.e.*, construction of the “inflation ribbon” given the alleged fraud), they will be applied on a class-wide basis.

appropriate and needed in ... a securities class action. And to also then do work to identify challenges doing that type of work, whether it's possible or likely to be possible, doing some price impact analyses on the inflationary work... and I've given quite a bit of analysis to identify issues and challenges and whether it's likely that it can or can't be done accurately. But it's really the absence of any analysis that I'm filling or partially filling on the front end of my opinions.<sup>15</sup>

A. Mr. Deal Does Not Attempt to Demonstrate a Lack of Price impact

11. In my reading of the Deal Report and Mr. Deal's deposition testimony, it appears that, based on Mr. Deal's interpretation of Plaintiffs' purported burden in securities class action litigation (or possibly the guidance from Defendants' Counsel), he asserts that demonstrating price impact could be difficult. Specifically, Mr. Deal suggests that additional factors may have contributed to the price movements of CenturyLink Securities on the misstatement days or the price declines on the corrective disclosures, and that Plaintiffs have not adequately accounted for these purported "complexities" in demonstrating that the misstatements had a price impact.

12. I understand from Plaintiffs' Counsel that, as a legal matter, Mr. Deal's criticism in this regard is misplaced, as it is not Plaintiffs' burden to demonstrate price impact. Rather, given that Mr. Deal and I both agree that the markets for CenturyLink Securities were efficient, it is Defendants' burden to fully sever the link between the misstatements and any impact on price. As a matter of economics, Mr. Deal does not even attempt to demonstrate a lack of price impact and has admitted he has not performed the analysis necessary to do so. Further, nothing in Mr. Deal's report or analyses demonstrate

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<sup>15</sup> Deal Tr. 62:8-63:14. The clarification of Mr. Deal's assignment and the issues I am to address were necessary, as the Deal Report, ¶2 and ¶25 have two ambiguous paragraphs describing his assignment ("I have been asked to address certain economic and financial issues in connection with this Action. I address these topics and provide supporting analysis in the body of this Report....I have been asked to address a number of economic issues in this Report. I focus first on the economic framework discussed above, which is completely absent from the Hartzmark Report. I then provide analysis related to his actual opinions, including analysis and critique of his event study methodology for both CenturyLink's equity and its 7.60% Notes.").

a lack of price of impact and, to the contrary, indeed suggest there is no evidence of a lack of price impact.

B. No Individualized Issues Emerge from Mr. Deal's Opinions Related to Damages

13. Mr. Deal also opines that “it is necessary to provide an articulation of how a common damages model will be developed that will incorporate the complexities of the case.”<sup>16</sup> Based on this interpretation of legal requirements, Mr. Deal opines that I purportedly failed to present in my Opening Report a “model [] capable of measuring only those damages arising from Plaintiffs’ theory of liability given the particular facts and circumstance of the specific case at hand.”<sup>17</sup> Specifically, Mr. Deal opines that because of certain purported “complexities”<sup>18</sup> specific to this CenturyLink matter, it will be challenging, if not impossible, to construct the actual inflation ribbon.

14. I understand from Plaintiffs’ Counsel that Mr. Deal’s interpretation is incorrect as to Plaintiffs’ burden at this stage of the litigation. As a matter of economics, Mr. Deal is wrong that the common damages methodology described in my Opening Report cannot be applied class-wide to calculate individual investor damages. In referring to “complexities,” Mr. Deal is opining that it will be difficult to perform a damages or loss causation analysis. He goes a step further and suggests that at this class certification stage of the litigation I need to describe in-depth the tools and techniques that are generally-accepted and commonly-utilized to construct an inflation ribbon, such that the ribbon would

... incorporate the complexity of the allegations in this Action  
... be scaled to vary over time based on the ... alleged  
inflationary misstatements ... be further scaled to account for  
the alleged “low cramming” period in the middle of Class  
Period ... be parsed to account for the five different categories  
of alleged misrepresentations ... be scaled to vary across the ...

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<sup>16</sup> Deal Report, ¶6.

<sup>17</sup> Deal Report, ¶6.

<sup>18</sup> Deal Report, ¶6.

alleged corrective disclosure dates ...[and] account for the FUD.<sup>19</sup>

15. As a general matter, the purported “complexities” are hardly unique to this CenturyLink matter; in fact, these same issues associated with Mr. Deal’s opinion about the challenges of constructing an actual inflation ribbon have become boilerplate Defendant responses in securities class actions. Mr. Deal’s criticism that I failed to account for the purported “complexities” that will be “challenging” when, at the loss causation and damages stages, the expert economist has to disaggregate price reactions (*i.e.*, parsing to separate the price reaction caused from the disclosure of alleged fraudulent information from the price reaction caused from the disclosure of non-fraudulent information), vary inflation levels over time (*i.e.*, scaling to account for how the inflation caused from the disclosure of alleged fraudulent information fluctuates) or otherwise separate price movements caused by fraudulent disclosures versus other non-fraudulent factors, clearly represent issues that are quintessential loss causation inquiries because they are focused on the causal relationship between the amount of the price movements and the variation in price levels caused by the misstatements or the revelation of the truth. In my experience as a testifying expert, these issues of parsing, scaling, multiple allegations, different categories of misrepresentations or omissions, and other questions Mr. Deal raises are all issues concerning the construction of the inflation ribbon and are therefore issues that are common to the class.<sup>20</sup> Thus, no individualized issues emerge based on Mr. Deal’s opinions and analyses.

16. As for his secondary opinion related to “specific statistical analysis” in my “event studies” and resulting abnormal returns (*i.e.*, the measured daily price changes in the CenturyLink Securities after accounting for market and industry effects), none of the purported “technical problems with [my] event study,”<sup>21</sup> he discusses would materially

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<sup>19</sup> Deal Report, ¶186 (emphasis omitted).

<sup>20</sup> Mr. Deal appears to agree that the issues will be common to all investors, especially as it relates to FUD. *See*, Deal Tr. 215:20-216:20.

<sup>21</sup> Deal Report, ¶105.

alter my opinion that there is ample evidence that the alleged misstatements in this case had price impact, and that a common damages methodology can be developed for the CenturyLink Securities at issue in this case. Rather, the technical issues he discusses will be addressed by expert opinions related to materiality, loss causation and damages at later, appropriate stages of the case, when discovery is complete.

## **V. MR. DEAL DOES NOT OFFER AN OPINION, NOR ANY EVIDENCE, THAT THERE IS A LACK OF PRICE IMPACT**

17. Plaintiffs' Counsel has informed me that the Supreme Court held in *Halliburton II* that “defendants must be afforded an opportunity before class certification to defeat the presumption [of reliance] through evidence that an alleged misrepresentation did not actually affect the market price of the [security].”<sup>22</sup> Critically, Mr. Deal does not opine that the alleged misrepresentations in this case had no effect whatsoever on the price of CenturyLink Securities—nor could he, as the analyses he conducted do not (and cannot) support that definitive and empirically-based conclusion.<sup>23,24</sup>

18. Rather, Mr. Deal attempts to show, through purported analyses of stock price response on misrepresentation, omission and corrective disclosure days, that price impact may be difficult to prove. He attempts to do this by arguing that I failed to account for the complexities of parsing, scaling, or otherwise separating price movements caused by fraudulent disclosures versus other non-fraudulent factors. But Mr. Deal's analysis –

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<sup>22</sup> *Halliburton Co., et al. v. Erica P. John Fund, Inc.*, 134 S.Ct. 2398, 2417 (2014) (“*Halliburton II*”).

<sup>23</sup> Mr. Deal has not made any attempt to separate the price impacts of the fraudulent from the non-fraudulent information. Deal Tr. 131:8-14 (“Q Okay. And like you just mentioned, it's very -- or you were saying it's difficult to parse those different effects out, and that's not something you attempted to do here in your report, right? A I certainly didn't attempt to literally do the parsing and quantify that.”).

<sup>24</sup> Indeed, Mr. Deal admits he was not identifying price impact because he understands that to be the Plaintiffs' burden. Deal Tr. 65: 13-20 (“13 Q So were you given the assignment of figure out whether it's possible or likely to be possible, you know, to, like you said, to do a damages model and to show price impact? A I certainly wasn't asked to develop all the way through a methodology to identify price impact. That's the plaintiffs' burden, as I understand it, in these matters.”).

which is clearly focused on the issue of whether and how much a particular price reaction is caused by the revelation of the truth concerning a particular misstatement (as opposed to confounding information) and how that impact would vary over time – is a *quintessential loss causation analysis* because it is *focused on the causal relationship* between *the amount of the price movements and the variation in price levels caused by the misstatements or the revelation of the truth*. Moreover, by assuming that parsing or scaling is necessary for Plaintiffs to undertake at this class certification stage of the litigation, Mr. Deal has implicitly demonstrated that the alleged misstatements and alleged corrective disclosures caused at least a portion of the price movements (*i.e., there is no evidence of the absence of price impact from the misstatement or alleged corrective disclosures*).

19. My specific criticisms of Mr. Deal’s Back- and Front-End price impact analyses are set forth below.

A. Mr. Deal’s Conclusion that the Alleged Back-End Corrective Disclosures Are Not Actually Curative is Flawed and Unreliable

20. In this action, Plaintiffs allege the truth concerning CenturyLink’s sales practices and their impact on the Company’s financial condition that was concealed during the Class Period were revealed in a series of corrective disclosures. In the Memorandum related to Defendants’ Motion to Dismiss, the *CenturyLink* Court described the corrective disclosures as follows:

[T]he Complaint alleges that CenturyLink’s cramming was first revealed on June 16, 2017, when *Bloomberg* reported that Heiser had filed a whistleblower complaint claiming that she was fired after raising concerns about cramming with Post. (Compl. ¶¶ 152-54.) The article noted that the alleged cramming was widespread with unauthorized fees in the “many millions.”<sup>25</sup>

On June 19, 2017, Bloomberg reported on a consumer class action lawsuit on behalf of “potentially millions” of

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<sup>25</sup> CenturyLink Memorandum of Law & Order, dated July 30, 2019 (“MTD Order”), p. 47.



CenturyLink customers who had been defrauded through billing misconduct, which caused another statistically significant share decline of 1.4%. (*Id.* ¶¶ 158, - 160.)<sup>26</sup>

On July 12, 2017, the Minnesota Attorney General disclosed that, based on a year-long investigation, it had filed a lawsuit against CenturyLink that provided detail concerning CenturyLink's practices and their financial impact. (*Id.* ¶¶ 163-68.)<sup>27</sup>

21. In my Opening Report (**Appendix C** and **Appendix E**), I presented empirical information related to the calculation of all the abnormal returns throughout the Class Period, including on the dates the Complaint alleges were dates with corrective disclosures: Friday, June 16, 2017; Monday, June 19, 2017; and July 12, 2017.<sup>28</sup> The alleged stock-price effects in response to these alleged corrective disclosures occurred on June 16, 2017, June 19, 2017, and July 12, 2017.<sup>29</sup>

22. Mr. Deal utilizes a similar underlying empirical model to undertake his event study. Both of our event studies concluded that the price responses to the information disclosed in the corrective disclosures were highly statistically significant following the *Bloomberg* news story on Friday, June 16, 2017 at 1:50 p.m. (Eastern Time)<sup>30</sup> and the announcement that the Minnesota Attorney General had filed a lawsuit against CenturyLink on Wednesday July 12, 2017 at approximately noon (Eastern Time).<sup>31</sup> Mr.

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<sup>26</sup> MTD Order, p. 47.

<sup>27</sup> MTD Order, p. 47.

<sup>28</sup> Complaint ¶¶152, 158, 163.

<sup>29</sup> Complaint ¶¶154, 160, 171.

<sup>30</sup> "CenturyLink Is Accused of Running a Wells Fargo-Like Scheme," Bloomberg News, June 16, 2017, 1:50 p.m. CenturyLink's stock price reacted rapidly, and the abnormal return for the day of 4.82% is highly statistically significant (with a p-value below 0.01, which denotes statistical significance with greater than 99% confidence).

<sup>31</sup> Complaint, ¶18. "\*Minnesota AG Filed Suite vs CenturyLink on Billing Issues," Bloomberg News, July 12, 2017, 12:04 p.m. CenturyLink's stock price declined, with an abnormal return of -4.19%, which is also statistically significant with a p-value below 0.01, denoting statistical significance with greater than 99% confidence.

Deal also agreed that, in my event study, the additional information disclosed after the close of trading on Friday June 16, 2017 and on Monday June 19, 2017<sup>32</sup> resulted in a price response on Monday, June 19, 2017, which he describes as having “weak statistical significance.”<sup>33</sup> That both Mr. Deal and I find two of the three corrective disclosure dates to be statistically significant strongly supports a finding of price impact.

23. Nevertheless, Mr. Deal opines that, for the three alleged *Back-End corrective disclosures* (made on June 16, 2017, June 19, 2017 and July 12, 2017), “there are many reasons why it is **far from certain that these are**, in fact, **curative disclosure** dates that **contain any actual news** of one or more categories of fraud.”<sup>34</sup> Mr. Deal lists five reasons that purportedly support this opinion,<sup>35</sup> but these conclusions can really be distilled into two general categories: (1) the alleged corrective disclosures are not curative; and (2) there are certain technical considerations Mr. Deal believes are inappropriate in my event study — most importantly the length of time used to evaluate the reaction of the price to the news (*i.e.*, the event window). I disagree with Mr. Deal’s reasoning, and am of the opinion that Mr. Deal’s analysis does not show an absence of price impact.

**1. Analyst Reaction and Other Documentary Evidence Shows  
The Three Alleged Back-End Corrective Disclosures Had Price  
Impact**

24. Contrary to Mr. Deal’s conclusion, analyst reaction to the corrective disclosures supports that they revealed new, material information to the market, as further described below.

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<sup>32</sup> Complaint, ¶266 claims there were numerous news stories, analyst reports and “reports of consumer class actions alleging systemic billing misconduct.”

<sup>33</sup> Deal Report, ¶36. (“June 19, 2017, has weak statistical significance in Plaintiffs’ expert’s event study model...”) Using his own specification, Mr. Deal observes that on Monday June 19, 2017 there is “no statistical significance.” This difference will be briefly discussed below. However, for the purposes of class certification, the differences are irrelevant.

<sup>34</sup> Deal Report, ¶36 (emphasis added).

<sup>35</sup> Deal Report, ¶36.

**a) June 16-19, 2017**

25. Numerous analysts who followed CenturyLink issued reports in the aftermath of the June 16-19, 2017 corrective disclosures. To demonstrate that there must have been information the analysts considered to transmit to their investor clients, I first note that, overall, the analysts cited by Mr. Deal issued reports infrequently. Specifically, on average, these analysts issued reports on only approximately 4.0% of the dates over the 1,097-day-long Class Period.<sup>36</sup> For example, over the whole Class Period, Gabelli and Company issued 15 reports, Barclays issued 19 reports, and Cowen & Company issued 16 reports. These figures represent 1.4%, 1.7% and 1.5% of the dates (or on average, every 78, 58, and 73 days, respectively) during the Class Period, respectively. The infrequency of analyst report issuance and the average number of days between reports suggest that the corrective disclosures, which prompted numerous analyst reports to be issued, contained important information.

26. The following table is a list of analyst reports available from the S&P CapitalIQ and Thomson Eikon databases from June 16, 2017 through June 30, 2017. This may not include all analyst reports that were issued over the period.<sup>37</sup>

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<sup>36</sup> These analysts mentioned in the Deal Report include: Gabelli and Company (§116); Morningstar (§117); Morgan Stanley (§118); Bank of America Merrill Lynch (“BAML”) (§120); Barclays (§121); and Cowen & Company (§122).

<sup>37</sup> Often, in discovery, a more complete record of analyst reports is available if such reports were collected by a company’s investor relations department.

Analyst	Date/Time*	Title
Jefferson Research & Mgmt	Jun 16, 2017 01:55 PM	Jefferson Financial - CENTURYLINK INC
CFRA Equity Research	Jun 16, 2017 02:56 PM	CFRA REDUCES RECOMMENDATION ON SHARES OF CENTURYLINK TO HOLD FROM BUY
Morningstar Inc.	Jun 16, 2017 05:36 PM	CenturyLink Accused in Lawsuit of Signing Up Customers to Services They Didn't Request
Morningstar Inc.	Jun 16, 2017 05:41 PM	Morningstar   CenturyLink Accused in Lawsuit of Signing Up Customers to Services They Didn't Request
Gabelli & Company, Inc.	Jun 19, 2017 05:11 AM	CTL: Updating Estimates - Buy
Morgan Stanley	Jun 19, 2017 10:13 AM	CenturyLink, Inc.: CenturyLink Lawsuit Raises Questions but Precedents Suggest Limited Impact
UBS Investment Bank	Jun 21, 2017 09:59 PM	CenturyLink, Inc. "Trends to weaken in 2Q but deal close is near" (Buy) Levi
BofA Merrill Lynch	Jun 22, 2017 03:31 PM	CenturyLink: New post-deal management structure plays to strengths
Jefferson Research & Mgmt	Jun 23, 2017 02:00 PM	Jefferson Financial - CENTURYLINK INC
Barclays	Jun 26, 2017 12:18 AM	U.S. Telecom and Comm. Infrastructure: The Roz Report: A Risk Framework for Recent CenturyLink Allegations
Barclays	Jun 29, 2017 03:19 AM	CenturyLink / Level 3: Survey Points to Opportunities, But a Reset in Expectations Seems in Order

Sources: S&P Capital IQ and Thomson Eikon. \*Date/Time from S&P Capital IQ.

27. Of note, before the June 16, 2017 trading session was concluded, CFRA **downgraded** CenturyLink from a “Buy” rating to a “Hold” rating, stating the analyst “see[s] increased risks after an unconfirmed Bloomberg report cites a lawsuit filed by a former employee, accusing CTL of running a Wells Fargo type scheme.” This change in investment recommendation (from Buy to Hold) reflects that the analyst viewed the news in the corrective disclosure of major importance. I note that, while Mr. Deal had access to and cited and relied upon the June 16, 2017 CFRA report elsewhere in his report,<sup>38</sup> and it was cited in the Complaint,<sup>39</sup> he did not mention this the CFRA downgrade in the section of his report discussing “analyst reactions” to the June 16, 2017 corrective disclosures.<sup>40</sup>

28. Similarly, while Mr. Deal describes the Morningstar report issued on June 16, 2017 as “downplay[ing] the significance” of the corrective disclosure, a fair reading of that report suggests the opposite. Specifically, a portion of the report omitted from Mr. Deal’s report stated:

<sup>38</sup> See, e.g., Deal Report, Exhibit 30B.

<sup>39</sup> Complaint, ¶157.

<sup>40</sup> Deal Report, ¶¶112-22.

On June 16, a lawsuit was filed by a former employee of CenturyLink claiming she was fired for whistle-blowing regarding aggressive sales tactics similar to what Wells Fargo Bank did. She claims salespeople were pushed to make sales goals and would sometimes code accounts for additional services that the customer did not request. It is too early to tell if these allegations are true and if so, how extensive they are. Thus, for now we are maintaining our \$32 fair value estimate....We believe the shares of this narrow moat- and high uncertainty- rated name are undervalued. However, if the allegations turn out to be true and widespread, like at Wells Fargo, we would likely reduce our fair value estimate.<sup>41</sup>

29. Notably, consistent with the analyst's statement that "if the allegations turn out to be true and widespread, like at Wells Fargo, we would likely reduce our fair value estimate," Morningstar in fact reduced its fair value estimate for CenturyLink from \$32 to \$30 on July 13, 2017, the day after the third corrective disclosure revealing the filing of the Minnesota Attorney General lawsuit, and specifically in response to that disclosure.<sup>42</sup>

30. Mr. Deal appears to have ignored analysts' reactions that undermined his conclusions. For example, on June 21, 2017, UBS issued a report that noted that the "reports on the recent lawsuit have also weighed on shares"<sup>43</sup> and on June 26, 2017, Moody's issued a release stating that "CenturyLink's class-action lawsuit is . . . potentially credit negative."<sup>44</sup>

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<sup>41</sup> "CenturyLink Accused in Lawsuit of Signing Up Customers to Services They Didn't Request," *Morningstar*, June 16, 2017, at 1.

<sup>42</sup> "CenturyLink Sued by Minnesota Attorney General on Overbilling Customers; Cutting FVE to \$30," *Morningstar*, July 13, 2017, p. 1.

<sup>43</sup> "Trends to weaken in 2Q but deal close is near," *UBS*, June 21, 2017, p. 1.

<sup>44</sup> "Moody's says CenturyLink's class-action lawsuit is probably limited, but potentially credit negative," Moody's Investors Service Press Release, June 26, 2017.

31. Further, while Mr. Deal discusses the reports issued by Morgan Stanley,<sup>45</sup> Bank of America-Merrill Lynch,<sup>46</sup> Barclays<sup>47</sup> and Cowen & Co.<sup>48</sup> addressing the June 16 and June 19 corrective disclosures, the actual content of those reports demonstrates the major importance nature of the news made public in connection with the corrective disclosures, as further discussed below.

32. In total, including Moody's, at least six analyst reports were issued in June 2017 following the first alleged corrective disclosure (not including the qualitative analyst Jefferson Research & Management). I note that CenturyLink did not announce earnings results or file quarterly SEC forms during that period. The publication of numerous analyst reports shortly following the June corrective disclosures strongly calls into question the reliability of Mr. Deal's conclusion that there was no "additional substantive information" information disclosed on June 16, 2017 and June 19, 2017.

33. As my Opening Report showed, there was substantial analyst coverage of CenturyLink. However, most of the analyst reports were issued at regular frequency only when the Company disclosed material information (e.g., earnings releases, capital structure changes, corporate governance issues, etc.). The fact that numerous analysts issued reports in the wake of the corrective disclosures is, in my experience and opinion as a financial economist, a strong signal that they considered the additional information disclosed in the corrective disclosures to be of major importance. This conclusion is also based on decades of academic, peer-reviewed research on the importance of analysts to the disclosure,

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<sup>45</sup> CenturyLink Lawsuit Raises Questions but Precedents Suggest Limited Impact," *Morgan Stanley*, June 19, 2017, p. 1.

<sup>46</sup> "New post-deal management structure plays to strengths," *Bank of America Merrill Lynch*, June 22, 2017, p. 1 (emphasis added).

<sup>47</sup> "The Roz Report: A Risk Framework for Recent CenturyLink Allegations," *Barclays*, June 26, 2017, p. 1 (emphasis added).

<sup>48</sup> "Introducing Combined LVL Model; More Stable Ground but Questions Remain," *Cowen and Company*, July 5, 2017, pp. 4-5.

dissemination and processing of firm-specific information.<sup>49</sup> The analyst reaction here undermines Mr. Deal's conclusion that the allegations in the lawsuits reported on June 16, 2017 and June 19, 2017 could not have revealed any meaningful information to the market.

34. In addition, other evidence ignored by Mr. Deal shows that the disclosures had price impact. For example, about 15 minutes after the June 16, 2017 *Bloomberg* article was initially published, CenturyLink's VP of Investor Relations, Kristine Waugh, wrote to the Company's public relations firm, Joele Frank, and other senior CenturyLink executives, explaining: "Our stock price seems to be reacting strongly to this article. Down nearly \$1 on elevated volume all starting around 1pm."<sup>50</sup> Approximately 15 minutes later, a Joele Frank executive wrote internally: "now down 6% - do you think they need a statement? lawsuit without merit, blah blah."<sup>51</sup> Also on June 16, 2017, Ms. Waugh responded to an email from the Company's CFO, Defendant Stewart Ewing, explaining that "the article from Bloomberg (see below) also drove higher volume and the sharp price decline at around 1:00pm," a message that Ewing then forwarded to CenturyLink's Board of Directors Chairman Harvey Perry.<sup>52</sup> Similarly, CenturyLink's investor relations' financial services analytics firm IPREO wrote to Waugh and others at CenturyLink on June 16: "Shares of CenturyLink are dropping in afternoon trading after Bloomberg brought to light a lawsuit filed by a former employee who claims she was fired for exposing the telecommunications company's high-pressure sales culture."<sup>53</sup>

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<sup>49</sup> See, for example: Claire A. Hill and Brett H. McDonnell, eds, Research Handbook on the Economics of Corporate Law, Chapter 17: *The Role and Regulation of the Research Analyst*, 315-336 (Edward Elgar Publishing Limited, 2012); T. Clifton Green, *The Value of Client Access to Analyst Recommendations*, 41 Jnl. of Fin. and Quant. Analysis, 1-24 (2006); Michael J. Brennan, Narasimhan Jegadeesh, and Bhaskaran Swaminathan, *Investment Analysis and the Adjustment of Stock Prices to Common Information*, 6 Rev. of Fin. Stds., 799-824 (Winter 1993).

<sup>50</sup> JFWBK\_0014641, at -641.

<sup>51</sup> JFWBK\_0014641, at -641.

<sup>52</sup> CTLMNSEC00909169.

<sup>53</sup> CTLMNSEC00929264, at -264.

35. Moreover, as CenturyLink would announce in its August 7, 2017 10-Q, following the corrective disclosures, by “late June 2017, the Board of Directors formed a special committee of outside directors to investigate alleged improper sales and billing practices and related matters.”<sup>54</sup>

36. These facts from the still-developing record suggest that the June 2017 disclosures had price impact.

**b) July 12, 2017**

37. Numerous analysts who followed CenturyLink also issued reports in the aftermath of the July 12, 2017 corrective disclosure. I first note that analysts rarely issue multiple reports outside of their typical cycle and within such a short period unless the report is associated with an event analysts conclude is important to communicate to investors. Here, several analysts issued multiple reports between June 16, 2017 and the end of July, 2017, evincing a much shorter period between issuance of reports than is typical. Again, this in itself suggests the importance of the information in the disclosure about the Minnesota Attorney General lawsuit.

38. Indeed, analyst reports issued in the wake of the June 2017 corrective disclosures explicitly stated that the market would look to events like the filing of subsequent lawsuits to determine the scope and severity of problems at CenturyLink. For example, in the Morgan Stanley report discussed by Mr. Deal that was issued on June 19, 2017 noted:

One question which may be clarified in the near term is the scope of the alleged activity. We will be interested in the degree to which this appears to be an isolated incident, or something with broader geographical and financial scope. **We will therefore be watching for other potential lawsuits or press**

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<sup>54</sup> CenturyLink Form 10-Q, filed with the SEC on August 7, 2017, at 24.



**stories in other locations. If non emerge in the next few weeks, this this would suggest a more limited exposure.**

39. In fact, at least two analyst reports Mr. Deal discusses evince this exact phenomenon. On July 24, 2017, Cowen & Co. issued a report describing that “consumer fraud allegations” were driving CenturyLink securities price declines, and explaining that the recent state attorney general action further “legitimized” them:

Shares remain under pressure [from] the Consumer Fraud allegation[s], **which have clearly become more legitimized with state lawsuits**, making it incrementally more difficult to find a bottom in a worst case scenario view.<sup>55</sup>

40. Similarly, after its June 16, 2017 report stated that additional evidence demonstrating that the whistleblower allegations were “true and widespread” would cause Morningstar to lower its fair value estimate, Morningstar took such action on July 12, 2017, immediately following the disclosure of the Minnesota Attorney General action - and, as Mr. Deal concedes, did so specifically “as a result of the lawsuit”:

Morningstar issued a report on the day the news of the Minnesota AG’s suit was released, explaining that **they had reduced their fair value estimate of CenturyLink stock as a result of the lawsuit** (from \$32 to \$30 per share in their fair value assessment).<sup>56</sup>

41. And in any event, other analyst reports Mr. Deal cites plainly identify the announcement of various lawsuits against the Company as at least partially causing reductions in CenturyLink’s stock price, a point Mr. Deal does not meaningfully contest. For example, on July 17, 2017, analysts at BAML explained: “CTL shares have had a negative reaction **due to various lawsuits stemming from a wrongful termination complaint filed by a former employee**. The substance of the complaints, according to

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<sup>55</sup> Deal Report, ¶128 (“C2Q17 Telco Services Preview,” *Cowen and Company*, July 24, 2017, pp. 1, 5) (emphasis omitted and added).

<sup>56</sup> Deal Report, ¶125. “CenturyLink Sued by Minnesota Attorney General on Overbilling Customers; Cutting FVE to \$30,” *Morningstar*, July 12, 2017, p. 2.

reports, relates to excess services sales reps were pressured to sell.”<sup>57</sup> Similarly, on July 19, 2017, analysts at Morgan Stanley acknowledged that the news of the Minnesota AG lawsuit had induced CenturyLink’s stock price decline, stating: “**[T]he primary driver has been the announcement of lawsuits alleging CenturyLink has been inappropriately charging customers.**”<sup>58</sup>

42. On August 2, 2017, an analyst from MoffettNathanson explained:

[J]ust last month, **an out-of-the-blue legal risk cropped up** when a former employee claimed that the company intentionally overcharges its customers, with a class action suit filed soon after. Those claims gained a degree of credibility when Minnesota’s Attorney General filed suit against the company.<sup>59</sup>

43. And on August 3, 2017, Cowen & Co connected CenturyLink’s bearish stock performance to the lawsuit, stating: “CTL shares have already seen a meaningful stock pullback, **factoring in the lawsuit.**”<sup>60</sup> As is clear from these reports, numerous financial professionals considered the disclosures concerning the lawsuits reflected new, meaningful information relevant to their assessment of CenturyLink and to have caused all or a portion of the declines in CenturyLink’s stock following the July 12, 2017 disclosure.

44. Other evidence shows the importance of these disclosures as well. For example, on the day the Minnesota Attorney General’s filing was disclosed, CenturyLink was directly contacted by at least 15 media outlets—including The Wall Street Journal,

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<sup>57</sup> Deal Report, ¶126 (“2Q preview & model book - Weathering tough 2Q and looking for better 2H,” *Bank of America Merrill Lynch*, July 17, 2017, p. 27) (emphasis omitted and added).

<sup>58</sup> Deal Report, ¶127 (“2Q17 Preview: Counting Down to Level 3,” *Morgan Stanley*, July 19, 2017, p. 1) (emphasis omitted and added).

<sup>59</sup> CTLMNSEC00921090, at -090 (emphasis added).

<sup>60</sup> “Remain on Sidelines as Both CTL and LVLTL Look for 2H17 Improvement,” *Cowen and Company*, August 3, 2017, p. 1.

USA Today, Bloomberg News, Associated Press, Thompson Reuters, Star Tribune, Pioneer Press, WCCO, and Fox—seeking “comment regarding the Minnesota AG today.”<sup>61</sup>

45. In summary, Mr. Deal’s conclusion that “it is unclear what, if any, additional substantive information was disclosed in any of the three, and especially the latter two allegedly curative disclosures” appears to lack a reasonable economic basis, and at minimum plainly represents a fact-intensive merits issue that would seem to be impossible to determine at this stage given that discovery is ongoing (and, as I understand from Plaintiffs’ Counsel, far from complete). In any event, it is undeniable that Mr. Deal and I agree that CenturyLink’s securities price declines on June 16, June 19, 2017 and July 12, 2017 were caused in whole or part by the alleged corrective disclosures.

***2. Mr. Deal’s Opinion Is Based Upon His Flawed Assessment that the Allegations Are False, or that They Had Been Previously Disclosed***

46. Mr. Deal also purports to support his opinion that “**the alleged curative disclosures are not disclosures of findings or facts**”<sup>62</sup> on grounds that the allegations in the Complaint are not “true,” “accurate,” “reasonable,” or “correct.”<sup>63</sup> As an expert economist, I find Mr. Deal’s statement puzzling. First, is his belief that corrective disclosure must be from the issuer. However, many corrective disclosures in litigation come from third parties who reveal the truth about a company’s misdeeds, and it is not obvious why a legal complaint – which pleads factual matter – cannot reveal unanticipated, material facts to the market.

47. Nevertheless, Mr. Deal also criticizes my Opening Report for failing to examine and evaluate whether the allegations in the Complaint are true. Mr. Deal seems

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<sup>61</sup> CTLMNSEC00928096.

<sup>62</sup> Deal Report, ¶36 (emphasis added).

<sup>63</sup> For example, Mr. Deal repeats that I merely assumed the allegation were true (Deal Report, ¶¶14, 16, 18, 53, 164); states there are no methods shown to accurately measure inflation (Deal Report, ¶¶10, 12, 32, 70, 97, 105) or I assumed the Complaint to be accurate (Deal Report, ¶¶94, 105); and states that I did not evaluate the reasonableness of the assumption that the allegations are true (Deal Report, ¶¶53, 131, 185, 190).

to suggest that expert economists at the class certification stage – without the benefit of full discovery – should place themselves in the role of trier of fact and determine whether the allegations in a complaint are “true,” “accurate,” “reasonable,” or “correct.”<sup>64</sup> Mr. Deal also appears to purport to do so in his Report, and reaches the conclusion that the allegations in the case are not true. Based on this questionable conclusion, he appears to opine that the misrepresentations in this case lack price impact.<sup>65</sup>

48. However, it is my understanding from Plaintiffs’ Counsel, as well as my extensive experience in supporting both Defendants and Plaintiffs in securities class action litigation, that even for an eventual expert report, an expert economist opining at class certification is supposed to assume that liability will be proven at trial. The analysis Mr. Deal purports to offer, and to criticize my Opening Report for failing to contain, is, in my view, clearly an opinion related to the merits of this case, specifically liability, and goes beyond what I understand to be the role of the expert economist at even the damages stage of a case – let alone at class certification.

49. Mr. Deal also concludes, based on what economists and lawyers often refer to as the “truth on the market” hypothesis (“TOTM”), that “news about suspicions, allegations, and investigations of cramming in the telecom industry had been publicly

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<sup>64</sup> For example, Deal Report, ¶53 (“In this section, I provide economic analysis to show that an overarching assumption of truth of the allegations in the Complaint is neither warranted nor sufficient to support a conclusion that a common method of estimating price inflation can be developed in this Action.”); ¶55 (“I find that the underlying premise that the alleged curative disclosures were effectively revelations of a previously unknown truth is unsupported.”); ¶80 (“Overall, the analyses above highlight the complexity of these 52 frequently information-rich dates and the overly simplistic—and incorrect—premise that merely assuming everything in the Complaint will be shown to be true will somehow result in a damages measurement approach that will be common to all class members.”); ¶¶97, 105, 164, 189, 190.

Mr. Deal takes on his role of trier of fact even though he admits that in his view the allegations are unclear to him. Deal Tr. 35: 9-14 (“Here we’ve got a very, very complex case ... a little unclear what the exact allegations are.”).

<sup>65</sup> See generally Deal Report, ¶¶81-104.

**disclosed**<sup>66</sup> – and therefore suggests that that these corrective disclosures at issue in this case could not have impacted the prices of the CenturyLink Securities.<sup>67</sup>

50. However, as I understand from Plaintiffs’ Counsel, courts have stated that the TOTM argument is extremely fact intensive. As a matter of economics, I agree that determining whether information was previously disclosed (*i.e.*, who outside the Company knew what, when) often requires close scrutiny of relevant facts and internal documents to understand what might have been concealed). I note that Mr. Deal testified that he really had not evaluated all the relevant information in the allegations and the various disclosures; indeed, he characterized his analysis as “preliminary” and “illustrative,” and it is apparent that he selectively chose past events related to cramming, as well as a subset of post-announcement analyst quotes and news media cites, in an attempt to establish that the full truth about cramming at CenturyLink was completely disclosed prior to the corrective disclosures in this case.<sup>68</sup> Moreover, Mr. Deal also testified that he did not refer to or rely upon even a single non-public CenturyLink document.<sup>69</sup>

51. In any event, I do not find Mr. Deal’s TOTM opinion to be well-supported. To start, Mr. Deal admitted that the *specific information* concerning CenturyLink sales practices that was revealed in the three corrective disclosures could not really have been previously known by investors.<sup>70</sup> Indeed, he agreed that the information in the corrective

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<sup>66</sup> Deal Report, ¶36 (emphasis added).

<sup>67</sup> Mr. Deal relies on (and agrees with) my opinion that the CenturyLink Securities traded in efficient markets for this conclusion.

<sup>68</sup> Deal Tr. 31:9-13; 32:15-23; 74:20-76:10 (objections omitted); Deal Report, ¶¶54-58.

<sup>69</sup> Deal Tr. 116:13-117:1 (“Q I want to clarify it because I think it’s important. Have you looked at any internal CenturyLink documents dated during the class period? THE WITNESS: Just give me a moment here....The answer is no.”)

<sup>70</sup> Deal Tr. 87:5-15 (“Q Right. So, again -- but you’re not saying that Ms. Heiser’s lawsuit, the facts contained in that lawsuit, the other information disclosed on June 16th was publicly known or somehow existed in the market prior to that time? A Again, I agree with that certainly as to the specifics. I’m not aware that Ms. Heiser’s lawsuit or even any of the subsequent lawsuits that are referenced in the Complaint, that those -- that specific information about those specific lawsuits was known.”); Deal Tr. 87:17-88:2 (objection omitted) (“And then certainly the same is true of the July 12th corrective disclosure, you’re not suggesting that investors were

disclosures related only to sales practices (*i.e.*, he was unable to cite to any confounding information that was simultaneously released)<sup>71</sup> and did not perfectly reflect prior disclosures from CenturyLink related to third-party cramming,<sup>72</sup> and that the observed statistically significant stock price reactions on June 16, 2017 and July 12, 2017 were caused by the information of major importance in the corrective disclosures.<sup>73</sup>

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aware of the investigation by the Minnesota attorney general or the, you know, facts set forth in the Complaint that they filed prior to July 12th of 2017? I would certainly agree to the last part of that because, again, I have no reason to think that investors knew about the actual filing of the lawsuit.”).

<sup>71</sup> Deal Tr. 164:19-165:19 (“Q Other than FUD you haven't identified any other confounding information on any of the three disclosure dates that you believe caused the decline? A If I understand your question, you're saying that the three disclosure dates that you're alleging that I've studied here, the question is what other confounding information is there. I haven't studied that question in detail. I'm not -- I don't -- they're not earning disclosure dates so they don't have the same kinds of issues as, you know, many of the dates on the inflationary side. There may be other things on those days as well, but I haven't studied that in detail. I'm not aware of a significant number. I think -- I do see -- especially on the first and the third day, when I look at the intraday information, you know, I do see a connection -- let's take the first day between when this news comes out and the intraday, prices do seem to decline. So I don't dispute that there's a likely connection between those two, and it's not that there was also, oh, our plant blew up that day. I'm not aware of any of that type of confounding information.”).

<sup>72</sup> Deal Tr. 85:24-88:2.

<sup>73</sup> Deal Tr. 169:12-17 (“Q Okay. And I'm correct that we discussed this before, of the three alleged corrective disclosures, both you and Dr. Hartzmark, with your respective models, find June 16th and July 12th to be statistically significant; is that correct? A For the equity, that's correct.”); Deal Tr. 165:7-19 (“There may be other things on those days as well, but I haven't studied that in detail. I'm not aware of a significant number. I think -- I do see -- especially on the first and the third day, when I look at the intraday information, you know, I do see a connection -- let's take the first day between when this news comes out and the intraday, prices do seem to decline. So I don't dispute that there's a likely connection between those two, and it's not that there was also, oh, our plant blew up that day. I'm not aware of any of that type of confounding information.”); Deal Tr. 180:1-11 (“Yeah. I think that's right. I know that as I was reviewing the data -- and I'm looking at Exhibit 30A [for June 16, 2017], I think what's interesting to me -- it's got an interesting phenomena here which is, you know, you do see a fairly significant reaction. I'm not using 'significant' in the statistical sense here, although overall it does move in a statistically significant way from -- from over the course of the day, but it sort of looks like it kind of pauses a little and then falls off the cliff, the mini cliff here.”).

52. In addition, his opinion ignores numerous pieces of evidence, such as the analyst and internal commentary discussed above, which at minimum suggests that the market viewed the disclosures as revealing new information.

53. Further, Mr. Deal ignores that the June 16, 2017 *Bloomberg* story that is the first alleged partial corrective disclosure directly contradicts his theory that third-party cramming investigations and fines put investors on notice of the type of allegations at issue here. Specifically, the *Bloomberg* article explained:

Phone service giants such as AT&T Inc., Verizon Communications Inc., and Sprint have all settled cases in which third-party companies had been adding services to customers' phone bills without consent. These "cramming" issues typically involved \$9.99 monthly charges for horoscopes and trivia games. **That is different from a telephone company employee who may be looking to meet sales goals by creating false accounts or adding services to existing accounts without the subscriber's knowledge or consent.**<sup>74</sup>

54. In sum, Mr. Deal's arguments about the allegations in the Complaint being false and the truth having been previously revealed are both fact intensive merits arguments that I understand to be inappropriate at this stage of the case. Mr. Deal not only fails to acknowledge that determining such an issue is difficult at class certification, but he in fact *decides these issues in favor of Defendants*, based on a highly limited (at best) analysis that ignores a large amount of contemporaneous, countervailing evidence. In contrast to his unreliable and unsupported conclusion, the incomplete evidence available at this stage strongly suggests that the market was not aware of widespread cramming allegations against CenturyLink prior to the corrective disclosures.

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<sup>74</sup> "CenturyLink Is Accused of Running a Wells Fargo-Like Scheme," Bloomberg News, June 16, 2017, 1:50 p.m. (emphasis added).



**3. *Mr. Deal's Opinion Is Based Upon His Speculative and Novel Economic Theory that Fear, Uncertainty and Doubt Unrelated to Cramming Caused the Price Declines***

55. In an apparent attempt to bolster his TOTM hypothesis, Mr. Deal created a speculative and novel financial economic theory based on “his experience” in the technology *antitrust litigation* world.<sup>75</sup> His theory argues that the price impact from the curative information in the alleged corrective disclosures was *amplified* by what he calls “FUD” or, “‘fear, uncertainty, and doubt’ because of a large-scale fraud committed by Wells Fargo.”<sup>76</sup> In other words, Mr. Deal hypothesizes that the revelation of CenturyLink’s firm-specific news of cramming practices caused some immaterial price decline, but the FUD induced in the market caused most of the price impact from the alleged corrective disclosures. Mr. Deal appears to rely on FUD as an alternative explanation for the statistically significant stock price declines in reaction to the corrective disclosures, despite being unable to cite to any academic source or legal precedent related to measuring securities’ reactions to FUD, and indeed being unable to cite any use of the FUD concept outside of the antitrust and the telecommunications sales and marketing world.<sup>77</sup> Besides appearing to be entirely speculative, there are numerous flaws in Mr. Deal’s analysis.

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<sup>75</sup> Deal Tr. 156:5-25.

<sup>76</sup> Deal Report, ¶15. I note that Wikipedia describes FUD as:

“Fear, uncertainty, and doubt (often shortened to FUD) is a disinformation strategy used in sales, marketing, public relations, politics, cults, and propaganda. FUD is generally a strategy to influence perception by disseminating negative and dubious or false information and a manifestation of the appeal to fear. While the phrase dates to at least the early 20th century, the present common usage of disinformation related to software, hardware and technology industries generally appeared in the 1970s to describe disinformation in the computer hardware industry, and has since been used more broadly.” [https://en.wikipedia.org/wiki/Fear,\\_uncertainty,\\_and\\_doubt](https://en.wikipedia.org/wiki/Fear,_uncertainty,_and_doubt), accessed May 1, 2020.

<sup>77</sup> Deal Tr. 156:12-21 (“Certainly I -- again, I can’t cite as I sit here right now, but I know that there -- well, to the best of my recollection there was and there is, therefore, existing research in -- as I recall in the context of Microsoft and some of these kind of antitrust issues that FUD is something that is explored in the research. I can’t cite specific papers and things right now but I have a recollection that it’s a topic that’s explored.”).



56. First, Mr. Deal fails to set forth a coherent theory of how FUD works, how a scientist would replicate such an assertion (*i.e.*, price impact of the lack thereof), and how it is distinct or independent from risks revealed by allegations of cramming. Critically, he does not dispute that, despite FUD, CenturyLink Securities prices fell in conjunction with the disclosure of lawsuits against CenturyLink. In addition, Mr. Deal fails to explain how, if all investors knew the truth that this type of activity was being concealed - because of previously disclosed information about CenturyLink's or the industry's activities, as he claims was known by the market participants in his TOTM argument - why would information in the corrective disclosures cause there to be FUD? Mr. Deal also fails to explain how, if FUD was the cause of the price declines in the two June 2017 alleged corrective disclosures, it could reemerge and surprise investors again on July 12, 2017. In my view, these and other basic conceptual questions prevent FUD from being a meaningful alternative explanation for the decline.

57. Second, and notably, Mr. Deal in any event testified he has not opined that FUD caused 100% of the price declines on the corrective disclosure dates. In addition, he testified that he performed no empirical analysis to demonstrate that FUD caused any portion of the statistically significant securities price decline on the alleged corrective disclosure dates, let alone 100% of the decline.<sup>78</sup>

58. Needless to say, the questionable opinion Mr. Deal offers concerning FUD does not suggest, let alone establish, that there is an absence of price impact. In my view, it is at most an unsupported and vague partial explanation of the stock price declines.

#### ***4. Mr. Deal's Purported Analysis of Intraday Price Movements Does Not Show an Absence of Price Impact***

59. Mr. Deal examines intraday data and concludes, from a subjective eyeballing of minute-by-minute data (what at best is a cursory review that is devoid of any scientific rigor), that:

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<sup>78</sup> Deal Tr. 215:3-6 ("Before you leave the corrective disclosures, it's not just the fact that there's FUD out there. I think that's a contributing factor to why we see the drop we see.").

I find that the price reactions to information often move in directions and magnitudes different than those that would be predicted based on a simple assumption that the Complaint will be shown to be true.<sup>79</sup>

60. Because this conclusion is not supported by any generally-accepted scientific tests, it is flawed and thus unreliable. Further, as discussed below, Mr. Deal's intraday analyses did not even include consideration of the materials that he purports to examine—including, for example, a *Bloomberg* article in the Complaint alleged to be one of the corrective disclosures.

**a) June 16, 2017**

61. For June 16, 2017, Mr. Deal states:

I find that on June 16, despite the numerous news stories that were published after the 1:50 pm *Bloomberg* story (most of which reiterated the facts noted in the original *Bloomberg* story), CenturyLink's price recovered a substantial portion of the lost ground after an initial sell off.<sup>80</sup>

According to Mr. Deal, this observation supports his conclusion that “it is far from certain that these are, in fact, curative disclosure dates that contain any actual news of one or more categories of fraud.”<sup>81</sup>

62. This purported “finding” fails in two critical aspects that make it unreliable. First, Mr. Deal does not even examine whether the price movements (and in particular the “substantial portion of the lost ground”) he observes are statistically significant or simply normal random price movements academics and industry participants observe when examining intraday price data.<sup>82</sup> Moreover, on this date there were apparently revelations

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<sup>79</sup> Deal Report, ¶153.

<sup>80</sup> Deal Report, ¶154 (emphasis in original).

<sup>81</sup> Deal Report, ¶36.

<sup>82</sup> Mr. Deal admits that he “looks” at the points and it is “intended to be illustrative.” Deal Tr. 205:17-206:6 and 211:21-212:3.

of major importance and relatively high volume, all of which likely would cause an economist to expect substantial price volatility.

63. Second, failing to apply scientific principles, Mr. Deal does not even attempt to evaluate all the “news” or detect why the prices moved upward and downward. For example, he assumes the price responses would follow within a single minute of each of the selectively culled news items he identifies, but does not evaluate whether this is an appropriate window based on the type of information in the disclosures; and whether the disclosure was unanticipated, material news.

64. Indeed, Mr. Deal admitted in testimony that this was a “preliminary analysis.”<sup>83</sup> It fails to be a reliable, scientific analysis.

**b) June 19, 2017**

65. I have the same criticisms of Mr. Deal’s unscientific and unreliable analysis concerning June 19, 2017 disclosure. Again, he offers no rigorous scientific tests, nor fully develops assumptions on the event windows, nor does he offer an in-depth examination of the information disclosed in the news.<sup>84</sup> Even so, without any reliable support, Mr. Deal opines that:

For all the reasons stated above, **it is my opinion** that although the closing price on June 19, 2017 was indeed lower than the opening price, **the by-minute movement of CenturyLink’s stock price is not consistent with the assumption that the drop can be considered a timely response to the arrival of specific allegedly corrective news.**<sup>85</sup>

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<sup>83</sup> Deal Tr. 32:13-18.

<sup>84</sup> Indeed, Mr. Deal states his incomplete analysis of the intraday data supports his opinion that the allegations will not be proven to be “true.” He then goes on to admit that the analysis and conclusions are premature and based on his an insufficient, incomplete and unreliable analysis; stating: “I also conduct **additional economic analysis that show** that Dr. Hartzmark’s **blanket assumption that Plaintiffs’ allegations will be shown to be true** and can be used as the basis for a common approach to calculating damages **is not supported, even without a full analysis of loss causation.**” Deal Report, ¶164 (emphasis added).

<sup>85</sup> Deal Report, ¶161.

This reasoning fails to persuade for the same reasons his purported analysis concerning June 16, 2017 failed.

66. For June 19, Mr. Deal also attempts to offer an alternative causal explanation:

... the **overall price drop is not unique to CenturyLink**. I also plotted the by-minute price movement of Windstream, one of CenturyLink's main comparable competitors. Windstream, which had no allegedly curative disclosures on June 19, 2017, also saw a similar price movement on the same day. Hence, **it is uncertain if CenturyLink's overall price drop is directly reduced by the curative disclosure or is simply reflective of a sub-industry effect and/or investor sentiment** on that particular day.<sup>86</sup>

67. Mr. Deal suggests throughout his report that Windstream is considered by analysts to be a peer of CenturyLink. However, Windstream is a substantially smaller company (market capitalization of \$0.706 billion, as compared \$12.997 billion for CenturyLink).<sup>87</sup> Because Windstream is a much smaller competitor, co-movements in prices between CenturyLink and Windstream could easily be explained as Windstream responding to news disclosed about the large and widely followed CenturyLink. Indeed, throughout his report, Mr. Deal suggests that Windstream's price co-moves with CenturyLink. Therefore, it is entirely possible that what Mr. Deal eyeballs on June 19, 2017 is really about a possible billing fraud at CenturyLink that would raise concerns about similar issues at Windstream.

68. To evaluate these co-movements in prices using generally-accepted scientific methods and determine whether it is more likely they are based on CenturyLink information than Windstream-specific information or industry considerations, Indeed, I searched Factiva and Bloomberg for news related to Windstream over the period June 16,

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<sup>86</sup> Deal Report, ¶160.

<sup>87</sup> As of the end of December 2016 per Exhibits 29A and 29B to the Deal Report.

2017 through June 19, 2017.<sup>88</sup> For Windstream, there were no economically meaningful stories except for a **positive** story concerning the Colorado Public Utilities Commission's approval of Windstream's acquisition of Broadview Network. Therefore, the co-movements that Mr. Deal claims to observe are not support for his conclusion that the June 19, 2017 movements of CenturyLink were industry-related, as opposed to CenturyLink firm-specific movements due to the information in the alleged corrective disclosures being digested and processed, which caused Windstream to follow suit. At minimum, his unscientific "eyeball" test does not demonstrate that there was no "additional substantive information"<sup>89</sup> about CenturyLink disclosed on June 19, 2017, let alone that the allegations are untrue.

***5. Technical Differences in Event Window Between My and Mr. Deal's Event Studies Do Not Show an Absence of Price Impact***

69. Mr. Deal's equity event study differs in a handful of relatively minor<sup>90</sup> technical ways from mine. For the most part, these differences are immaterial: under either specification of the event study, the one-day price movements on June 16 and July 12 are highly significant at the 95% or higher confidence level. It is my opinion that these results are sufficient to show price impact of the alleged misrepresentations for the purposes of class certification, and in any event clearly demonstrate there is no evidence of a lack of price impact.

70. The most significant difference in our respective analyses concerns whether the stock price movement on June 19, 2017 is statistically significant. I use a two-day window for that disclosure, while Mr. Deal opines that a two-day disclosure is flatly

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<sup>88</sup> For Factiva, I searched all sources for June 16-June 19, 2017 for company "Windstream Holdings, Inc.". For Bloomberg, I searched all sources for June 16-June 19, 2017 for company "Windstream Holdings Inc" with "Low" relevance.

<sup>89</sup> Deal Report, ¶36.

<sup>90</sup> These minor differences include (1) our choice of industry index, (2) our method of calculating standard errors, and (3) whether we include "dummy" variables on earnings dates or not.

inappropriate. Based on his one-day result, and what Mr. Deal calls a “preliminary analysis of the disclosures on that date,” he concludes:

there is insufficient evidence to show that the 1.4% decrease is directly caused by any allegedly curative disclosures made that day.<sup>91</sup>

CenturyLink’s stock price is not consistent with the assumption that the drop can be considered a timely response to the arrival of specific allegedly corrective news.<sup>92</sup>

Since the price movement on June 19 cannot plausibly be tied to the alleged curative disclosure on June 16, it does not make sense to consider a two-day cumulative abnormal return as Dr. Hartzmark has done.<sup>93</sup>

71. Having reviewed Mr. Deal’s Report and deposition testimony, my opinion is that Mr. Deal’s conclusions and analyses are flawed, and I continue to suggest that June 19, 2017 provides meaningful affirmative evidence of price impact.

**a) The Stock Price Declines on June 19, 2017 Is at Minimum Economically Significant**

72. The Complaint alleges that, “On Monday, June 19, 2017, Bloomberg reported on a consumer class action lawsuit on behalf of ‘potentially millions’ of CenturyLink customers alleging billing misconduct that had been filed the day before, which on that day caused CenturyLink’s stock to fall by 1.4%”<sup>94</sup> and its 7.6% Note to fall by 2.4%.<sup>95</sup> In my Opening Report, I found that the common stock price decline was statistically significant at the 94% level—a confidence level Mr. Deal terms as “weak evidence of statistical significance.”<sup>96</sup>— and the 7.6% Note price again declined by a highly significant amount.

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<sup>91</sup> Deal Report, ¶159.

<sup>92</sup> Deal Report, ¶161.

<sup>93</sup> Deal Report, ¶163.

<sup>94</sup> Complaint ¶¶154-156. MTD Order, p. 11.

<sup>95</sup> Hartzmark Report, Appendix L.

<sup>96</sup> Deal Report, n178.

I also note that on June 20, 2017 the price of the 7.6% Note declined by an additional statistically significant amount of 2.7%.<sup>97</sup>

73. The price reactions of these two securities to the news and certain other information, when considered together, provide evidence that June 19, 2017 is, at minimum, an *economically significant* date, and clearly support the view that economically important information was introduced into the market. Mr. Deal did not consider the responses of these two securities in combination. Considering the securities together would also suggest that further analysis should be done, which is presented below.

**b) The Stock Price Declines on June 19, 2017 Should Be Considered a Timely Response to the Arrival of Specific Allegedly Corrective News**

74. In reaching his conclusions concerning CenturyLink's price movement on June 19, Mr. Deal failed to evaluate the potentially offsetting impact of certain key pieces of news that were disclosed during and after the June 16, 2017 trading day, some of which could possibly have cushioned the price decline. In particular, there were at least three publicly disclosed announcements of important information that he failed to reference that potentially had a cushioning effect on the price declines that observed for the stock and 7.6% Note.

75. To begin, the initial June 16 *Bloomberg* news story about the Heiser lawsuit was issued at 1:50 p.m., and appears to have had no substantive comment by CenturyLink management. Instead, the story explained that "Mark Molzen, a CenturyLink spokesman, said the company, 'just received the lawsuit. We are reviewing the allegations, which we take seriously.'"<sup>98</sup>

76. CenturyLink released a positive disclosure after the market closed on June 16, 2017, stating:

CenturyLink said it is taking the allegations seriously and is "diligently investigating" the matter.... "CenturyLink is here to

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<sup>97</sup> Hartzmark Report, Appendix L.

<sup>98</sup> JFWBK\_0014642.

serve our customers. As such, CenturyLink holds itself and its employees to the highest ethical standards and does not condone any type of unethical behavior,” said Annmarie Sartor, external communication manager for CenturyLink. “The allegations made by our former employee are completely inconsistent with our company policies, culture and Unifying Principles, which include honesty and integrity.”<sup>99</sup>

77. This statement was repeated in news and analyst reports, including in an updated version of the original Bloomberg article published earlier that day, which stated:

CenturyLink “holds itself and its employees to the highest ethical standards” and has “an Integrity Line in place, 24 hours a day, seven days a week,” Mark Molzen, a spokesman, said in a statement. “This employee did not make a report to the Integrity Line and our leadership team was not aware of this matter until the lawsuit was filed. We take these allegations seriously and are diligently investigating this matter.”<sup>100</sup>

78. A positive statement like this one could certainly cushion any stock price decline on Monday June 19, 2017 from the announcement of the Heiser suit on Friday, June 16, and the consumer fraud cases announced on Monday June 19, 2017.<sup>101</sup>

79. Second, an Oppenheimer analyst published a report prior to market open on June 19, 2017.<sup>102</sup> That report suggested that CenturyLink’s “4.6% drop amid accusations

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<sup>99</sup> *The News-Star*, “Suit Accuses CenturyLink of Wells Fargo-Like Scam,” June 17, 2017; *The Arizona Republic*, “Fired CenturyLink Worker Files Lawsuit Alleging Fraud,” June 18, 2017.

<sup>100</sup> “CenturyLink Is Accused of Running a Wells Fargo-Like Scheme,” Bloomberg News, June 16, 2017, 1:50 p.m. This article was updated from the original 1:50 p.m. release (and contains CenturyLink’s closing stock price).

<sup>101</sup> Mr. Deal did not examine this response by CenturyLink management, but agrees it could be important to consider. *See* Deal Tr. 193:2-10 (“Q It means when you're assessing what caused the, you know, stock to react on these two days, the 16th and the 19th, statements by the company would be something you'd want to consider? A Sure. ... I certainly agree that statements by the company could be relevant, if it's a general question like that.”).

<sup>102</sup> Deal Exhibit 31B, item 4, (“Buy CenturyLink on Drop After Lawsuit, Oppenheimer Says,” Bloomberg First Word, June 19, 2017 (8:47 EST)).



of a Wells Fargo-like scheme provides a ‘strong buying opportunity.’”<sup>103</sup> This too could have had a cushioning effect.

80. Notably, according to internal CenturyLink documents, the Oppenheimer analyst asked CenturyLink to respond to the allegations in the lawsuit over the weekend, noting that he thought he had “three dozen clients to get back to on Monday.”<sup>104</sup> Specifically, the Oppenheimer analyst asked CenturyLink to respond to the questions including, for example, what “systems are in place that would incentivize salespeople to add services that had not been approved only customer bills, and what checks are there to spot and more importantly disincentive this behavior?” and whether customers calls were taped, “giving a record of approved services?”<sup>105</sup>

81. Third, after the close of the market on June 16, 2017, Corvex Management, “run by Carl Icahn protege Keith Meister,”<sup>106,107</sup> filed a Schedule 13D indicating that it had acquired 16,271,943 shares of CenturyLink stock.<sup>108</sup> This large purchase – representing approximately three times CenturyLink’s average daily volume over the Class Period – could have signaled substantial support. Either that or the fact that it constituted sizeable volume could have cushioned the impact of any adverse information.

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<sup>103</sup> “Buy CenturyLink on Drop After Lawsuit, Oppenheimer Says,” Bloomberg First Word, June 19, 2017, 8:47 a.m.; JFWBK\_0014702.

<sup>104</sup> CTLMNSEC00918821 at CTLMNSEC00918822.

<sup>105</sup> *Id.* at CTLMNSEC00918821

<sup>106</sup> <https://uk.reuters.com/article/us-energen-corvex-idUKKBN19A2W8>.

<sup>107</sup> In terms of the impact of an announcement of a 5% stakeholder, Mr. Deal testified: “When you say ‘have an impact on price reaction,’ I think what you’re asking is could the fact that they disclosed hey, you know, Carl Icahn is taking a five percent position in the company, is that the sort of thing that might move the stock price, yeah, I think it could, if that’s your question.” Deal Tr. 199:1-7.

<sup>108</sup> SCHEDULE 13D, filed 2017-06-16 17:02:49 (emphasis added). I note that there was a large positive jump in the price of CenturyLink common stock late in the day along with a substantial volume. This included the price of \$25.91.

82. Thus, these mitigating factors, which might have cushioned the price decline on June 19, 2017, suggest that the empirical evidence demonstrating “weak statistical significance” might nonetheless show that highly significant negative news was released.

**c) The Two-Day Price of CenturyLink Stock Is Tied to the Alleged Curative Disclosures**

83. Mr. Deal’s outright rejection of the two-day return I provided in my analysis of both the stock and the 7.6% Note has no support in (a) the timeliness of the response to news disclosed late in the trading day; (b) academic literature; and (c) court precedent. Mr. Deal relies on full trading days of 6.5 hours (or longer as discussed below) for all of his empirical analyses. Yet he dramatically shortens that period in connection with examining the impact of the information in the corrective disclosures.

84. Mr. Deal states:

It is unclear from his report whether Dr. Hartzmark is arguing that the price reaction on June 19, 2017 was a delayed reaction to news released on June 16 or was a reaction to new information that came to light over the weekend and on the day itself. Careful analysis does not support either argument. The delayed reaction argument is not plausible, given Dr. Hartzmark’s own evidence on market efficiency for CenturyLink stock. Additionally, Dr. Hartzmark and my analyses of intraday stock prices on June 16 and July 12 show that the stock price reacts rapidly (near-instantly) to the arrival of relevant news. Since the news was relatively straightforward, there is no reason to believe that the market needed additional time to process the information. The second argument, that it was new information or the cumulative effect of the new information that drove the stock price decline, is also not persuasive. As I have shown, the stock price movement does not correlate well with the arrival of specific news, and is marked by periodic positive spikes, which weighs against an accumulation of bad news theory.<sup>109</sup>

85. Below I describe why this opinion is flawed. In my Opening Report, for both CenturyLink Securities I presented daily statistics for both June 16 and June 19, 2017, as

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<sup>109</sup> Deal Report, ¶162.

well as certain t-statistics and p-values for the cumulative two-day returns. There were five reasons why I included these multi-day returns that any experienced financial economist would understand. First, the disclosure in the Bloomberg news release was at 1:50 pm – only two hours and ten minutes prior to the close of trade. Second, this was a somewhat atypical news story and certainly was not part of a normally scheduled corporate announcement — such as an earnings release, or dividend announcement — the date and time of which is generally known in advance. Third, the nature of the news was not immediately quantifiable, as reflected in contemporaneous internal CenturyLink documents concerning the disclosures and analyst commentary. Fourth, the news was not disclosed by CenturyLink, but by a third party. And fifth, one of the securities that is being evaluated in this matter is a corporate bond, which trades in an efficient market, but as explained in detail in my Opening Report, a market that has different features and characteristics from those of equity.

86. **Academic literature supports using a full trading day, and the disclosure June 16, 2017 was very late in the trading day.** Throughout most of the history of peer-reviewed financial economic academic literature, researchers have employed market close-to-close data to evaluate a disclosure's impact on price. This is also consistent with how the courts have evaluated price movements. This research certainly supports, at minimum, looking beyond a two-hour period, which is all that was remaining in the trading day on June 16, 2017 after the *Bloomberg* story about the Heiser complaint became public.

87. Conducting a full-trading-day analysis on the June 16, 2017 disclosure – which would incorporate several hours on June 19, 2017 – would yield a highly statistically significant result. A full trading day following the June 16, 2017 announcement would run until June 19, 2017, at 1:50 p.m. At that time, CenturyLink's stock price was \$25.30 per share – **lower** than the June 19, 2017 **closing** price of \$25.35 per share. Thus, the price decline over a full trading day following the *Bloomberg* story (*i.e.*, 1:50 p.m. on June 16 to 1:50 p.m. on June 19) is **greater** than the one-day close-to-close return I actually utilized for my daily return calculation.

88. **Complex information disclosed by third parties can certainly take longer than two hours (and even longer than a single trading session) to be fully digested.** Corporate information must first be disclosed. Then, it must be disseminated. After that, it must be digested by market participants, including analysts. This whole sequence can sometimes happen within minutes, particularly when news is disclosed by the issuer, the disclosure event is anticipated, and the information is easy-to-digest. However, academic literature is clear that the speed of response will depend on a number of factors, including: who make the disclosure, how the disclosure is disseminated, the complexity of evaluating the information in the disclosure, and the nature of the trading in or the microstructure of the particular securities market at issue.<sup>110</sup>

89. Clearly, the alleged corrective disclosure on June 16, 2017: would not have been anticipated in the way a scheduled announcement would be; included atypical, relatively complex, and less-easily-quantifiable information (factual allegations in lawsuits); and was made by a third-party unrelated to CenturyLink. Thus, it is reasonable to expect that the full dissemination and digestion of this information—particularly when the Company was issuing offsetting positive statements on the topic—could take longer than, for example, the processing of numerical information contained in a scheduled earnings announcement.<sup>111</sup> Indeed, the documentary evidence suggests that the disclosure

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<sup>110</sup> As I stated in my Opening Report, “It is not unusual that over a class period the corporation will announce earnings, dividends, discoveries, new products, management changes, new issues of securities, lawsuits that it files, lawsuits filed against it, projections, regulatory changes that impact its business, and more.” Hartzmark Report, ¶63. Clearly these are different types of information that take different skills to decipher. In addition, the rate of price response to information can be impacted by different disclosure platforms (third parties versus the company itself); different securities (bonds versus stock); and different times of the day for release (pre-market versus during the trading day).

<sup>111</sup> Mr. Deal agrees that earnings announcements are made in a different environment and might have different speed of response to other types of information. Deal Tr. 173:13-20 (“Q And analysts and investors and market participants are expecting that information will be disclosed on earnings announcement dates? A They’re expecting information to be disclosed. Obviously they have their own expectations of what that information will be, but, yeah, they’re -- they’re certainly watching for it, if that’s your question.”). Deal Tr. 175:2-8 (“Do you know or are you aware of any academic research showing that the length of time for information to be reflected in a stock price might differ based on the nature of the disclosure? A Not off the top of my

raised significant questions for analysts and investors that took time to process.<sup>112</sup> Moreover, CenturyLink’s own investor relations analytics provider, IPREO, noted that “additional reporting on lawsuits hitting CTL really weighed on shares” until **June 20, 2017**,<sup>113</sup> and the Company’s investor relations personnel and other observers noted the “stock has continued to decline” in the days after the corrective disclosures.<sup>114</sup>

**90. Recognizing these facts, academics and the courts have realistically evaluated speed of response over multi-day windows.** Consistent with the points above, using multi-day returns is common in academic research.<sup>115</sup>

91. As also discussed in my Opening Report, it is also common in securities litigation. For example, a recent decision focusing on common stock, *Monroe County*

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head. It wouldn't surprise me. I mean, that seems like exactly the kind of topic that finance guys might study.”).

Interestingly, Mr. Deal appears to have no problem lengthening the time period that he measures a pre-announcement price when examining the price responses of the 7.6% Note. In his analysis of the 7.6% Note, for his calculation of pre-announcement Note prices on dates where an announcement is made in the middle or late in the trading day he not only uses trades on that day prior to the announcement time, but also includes all trades on the prior trading day as well (*see* Deal Exhibit 33). Thus, he feels comfortable extending the pre-announcement time period but fails to incorporate the identical approach on the post-announcement price calculation.

<sup>112</sup> See, e.g., CTLMNSEC00918821 (Oppenheimer analyst asking CenturyLink to respond to a series of questions about the whistleblower allegations); CTLMNSEC00920833 (Morgan Stanley analyst asking to speak to CenturyLink investor relations representative to “recap a few calls I’ve had post article, and hear your thoughts”).

<sup>113</sup> CTLMNSEC00929196.

<sup>114</sup> CTLMNSEC00918676 (CenturyLink investor relations representative forwarding a Barron’s article title “CenturyLink Falls for Fourth Day in a Row as Legal Threats Mount” and discussing internally on June 22, 2017 that “In my opinion, the rhetoric from investors is picking up about why the company hasn’t said more. Especially since the stock has continued to decline.”).

<sup>115</sup> Craig A. MacKinlay, *Event Studies in Economics and Finance*, 35 Jnl. of Econ. Lit. 13 (1997), pp. 14-15 (“MacKinlay makes clear that examination of stock price effects that occur on the second trading day is perfectly appropriate in event study analysis.”).

*Employees Retirement System v. Southern Company*, made it clear two-day windows can be appropriate.<sup>116</sup> The *Monroe* court explained:

First, using exclusively one-day event windows does not change [] conclusion[s] concerning market efficiency. As a result, the debate about event windows in this case is largely academic. Second, there are many cases that find that multi-day event windows are appropriate for event study analysis in securities fraud class actions.<sup>117</sup> Third, and more broadly, the Supreme Court has expressly refused to “adopt any particular theory of how quickly and completely publicly available information is reflected in market price.”<sup>118</sup> Fourth, academic literature supports the use of two-day (or more) event windows.<sup>119</sup> Fifth, the Court finds, in accordance with the academic literature, that when the particular facts and

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<sup>116</sup> *Monroe Cty. Employees’ Ret. Sys. v. Southern Co.*, 332 F.R.D. 370, 391 (N.D. Ga. 2019) (“*Monroe*”).

<sup>117</sup> *Monroe*, 332 F.R.D. at 391 (collecting cases); *In re DVI, Inc. Sec. Litig.*, 639 F.3d 623, 635 (3rd Cir. 2011) (“That some information took two days to affect the price does not undermine a finding of efficiency.”), *abrogated on other grounds by Amgen Inc. v. Connecticut Retirement Plans and Trust Funds*, 568 U.S. 455, 133 S. Ct. 1184, 194 L. Ed. 2d 308 (2013); *In re Xcelera.com Sec. Litig.*, 430 F.3d 503, 513 n.11 (1st Cir. 2005) (rejecting argument that two-day window is inconsistent with efficient market); *Carpenters Pension Tr. Fund of St. Louis v. Barclays PLC*, 310 F.R.D. 69, 96 (S.D.N.Y. 2015) (“A two-to three-day window is common in event studies.”); *In re Vivendi Universal, S.A., Sec. Litig.*, 634 F. Supp. 2d 352, 372 (S.D.N.Y. 2009) (using three-day window); *Fogarazzo v. Lehman Bros.*, 263 F.R.D. 90, 104 (S.D.N.Y. 2009) (accepting event study with three-day window and rejecting argument that multi-day window only applied “where the timing of discrete events was [not] ascertainable”).

<sup>118</sup> *Monroe*, 332 F.R.D. at 391 (“Following its decision in *Basic*, the Supreme Court in *Halliburton II* reiterated that it would not enter the fray of academic debates about the speed at which information is impounded into a stock price, and reconfirmed that market efficiency is based on the fairly modest premise that market professionals generally consider most publicly announced material statements about companies, thereby affecting stock market prices.” (internal quotation marks and citations omitted)).

<sup>119</sup> *Monroe*, 332 F.R.D. at 391-392 (“For example, MacKinlay explains that two-day event windows are appropriate when analyzing earnings announcements. Professor Feinstein cited multiple other legal and academic papers endorsing the use of multi-day event windows and explaining that price reactions to news sometimes occur over two or more trading days, including a paper by David I. Tabak, who explains that ‘[i]n securities fraud cases, many experts have adopted the convention of looking at one-day, two-day, or five-day periods following an announcement.’ ... [Although] stock price reactions generally *begin* quickly, this does not necessarily mean that stock price reactions always *end* quickly. Rather, as Professor Feinstein explained, ‘[i]t is not settled science that an efficient market price reaction is over within a matter of minutes.’” (emphasis in original)).

circumstances justify investigating multi-day event windows, such analysis is appropriate. Finally, the Court rejects Defendants' suggestion that [multi-day] analysis should be disregarded because [it] did not analyze *only* one-day windows or *only* two-day windows. The Court is unaware of any rule, and Defendants cite none, requiring that one must commit at the outset, before analyzing the data, to investigate only one-day or only two-day event windows. [An] event study analysis is "an investigation, and the results might compel you to look at a larger window."<sup>120</sup>

92. It is clear from this decision and the approach of many other courts that the use of a multi-day window is reliable for evaluating whether a security trades in an efficient market.<sup>121</sup> These courts have realized that it might take more than a trading day for news to be disseminated and digested (or processed) by interested parties.

93. *The facts here support a window extending beyond the close on June 16.* In this matter, the "particular facts and circumstances" justify investigating multi-day event windows. As set forth above, the June 16 disclosure happened very close to the end of the trading day – so a "two-day" window for that disclosure is actually closer to a single trading session than a "one-day" window, which comprises approximately two hours. Using the "two-day" window allows the analysis to account for the time it would take for market participants to become aware of the third-party disclosures, fully evaluate and process the new, unanticipated, material information contained in them, and act on it—which the limited documentary evidence reviewed suggests in fact happened. This, in combination with the release of new information over the weekend of June 17-18, 2017 and additional information released on June 19, 2017, justifies the use of a "two-day" event window. In addition, the new information released on June 19, 2017 is alleged to be directly related and in response to the information disclosed on June 16, 2017, which would further support using a two-day event window.

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<sup>120</sup> *Monroe*, 332 F.R.D. at 393 (emphasis in original).

<sup>121</sup> *See* n. 117.



94. Although Mr. Deal does not provide a two-day cumulative return, based on his back-up materials, he reported t-statistics for June 16 and June 19, 2017. Therefore, I was able to calculate the statistical significance of his model. His model, like mine, also yields a two-day return that is statistically significant.<sup>122</sup>

**6. *Mr. Deal's Conclusion that "June 16, 2017, has no statistical significance for the 7.60% Notes" Is Flawed and Based on His Limited Event Window, including His Inconsistent Application of VWAP Calculations***

95. As I explained in my Opening Report, academics, industry participants and courts have accepted the fact that the microstructure, features and characteristics of corporate bond markets are different from those of equity markets. I explained why academics, industry participants and courts, understanding these differences, have accepted that in efficient securities markets the speed of response of a corporate bond price for a given issuer might not be as rapid as the equity price for the same issuer. This is obvious, simply from the construction of the prices that are employed by expert economists, such as both Mr. Deal and myself. In academic and court evaluated equity analyses it is generally the case that closing prices are used. Because of the structure, features and characteristics of corporate bond markets, volume-weighted transactions prices (VWAP) are generally used.

96. Although Mr. Deal and I agree that the 7.6% Note traded in an efficient market, and Mr. Deal agrees that the use of VWAPs that I used for determining daily prices of the 7.6% Note is an appropriate methodology,<sup>123</sup> Mr. Deal, without any specific support, introduces two issues into his empirical analyses. First, he dismisses the use of full trading sessions for his analysis of price changes. Second, he proposes an alternative method to

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<sup>122</sup> Based on taking the sum of Mr. Deal's t-statistics of -4.54 and -0.68, and dividing by the square root of 2, yielding a t-statistic of -3.69 which is statistically significant at the 99% confidence level.

<sup>123</sup> Deal Report, ¶170 ("Therefore, instead of using the closing price to calculate daily returns, as is typically done in equity event studies that rely on daily market data, academic research recommends the use of daily average transaction prices that are weighted by trade size, also known as volume weighted average prices ('VWAP').") (footnote omitted).



calculate prices before and after the time of the alleged corrective disclosures.<sup>124</sup> These are critically important differences, given that I analyzed price changes that resulted from announcements that took place during the trading days, and for the most part in the later portion of the trading days. These included the alleged corrective disclosure dates (June 16, 2017 and July 12, 2017) and two dates with credit ratings downgrades (March 13, 2014 and October 31, 2016). The “markedly different” abnormal returns that Mr. Deal finds are thus wholly attributable to his different pre- and post-announcement prices on the alleged corrective disclosure dates.

97. Therefore, the distinction between the purportedly “markedly” different abnormal returns is a matter of (a) the different definition of the pre- and post-announcement VWAPs; and (b) the event windows for June 16 and June 19. For June 16, 2017, I have effectively measured the return based on the price movement on the trading day following the late-afternoon disclosure; and for June 19, I have measured the return in the same manner and also including the next trading day, June 20. If Mr. Deal’s return series is analyzed on the same window as I used for June 16 – *i.e.*, pre-announcement for June 16, 2017 through June 19, 2017 – his abnormal return becomes very similar to mine: Mr. Deal’s is -2.63%, which mine is -2.65%.<sup>125</sup>

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<sup>124</sup> For all four of these dates, Mr. Deal calculates VWAPs based on the following methodology. For the pre-announcement price, Mr. Deal modifies his VWAP calculation to include all transactions during stock market trading hours (9:30 a.m. through 4:00 p.m.) the day prior to the announcement, as well as all trades during stock market hours up until the time of the announcement on the day of the announcement. For post-announcement price, Mr. Deal modifies his VWAP calculation and includes those trades over a few hours that occurred prior to the closing of the stock market trading hours after the time of the announcement only on the announcement day (*see* Deal Exhibit 33). I am not sure why Mr. Deal arbitrarily includes an entire day prior to the day of the announcement in his pre-announcement price but limits the post-announcement price to only those trades occurring after the announcement on the day of announcement only.

<sup>125</sup> -2.63% equals the compounded Deal abnormal returns of -0.65% for June 16, 2017 and -1.99% for June 19, 2017. The t-statistic of the 2-day window is 3.03, based on the sum of Mr. Deal’s daily t-statistics of -1.09 and -3.20, divided by the square root of 2, which is statistically significant at the 99% confidence level.

98. In summary, Mr. Deal's conclusion that "June 16, 2017, has no statistical significance for the 7.60% Notes"<sup>126</sup> is based on his different definition of pre- and post-announcement VWAPs and his choice of a shorter event window relative to those I employed in my analysis. Neither of Mr. Deal's differing assumptions is obviously preferable to mine, and so his analysis does not provide evidence demonstrating a lack of price impact.

**B. Mr. Deal's Opinion Is Based Upon His Flawed Conclusion that the Front-End Misstatements Might Not Be Inflationary Disclosures**

99. Mr. Deal also claims that an analysis of the numerous alleged *Front-End misstatements* during the Class Period shows a lack of price impact. Mr. Deal claims that, in light of the "five different categories" of alleged misstatements that were made over a "long Class Period" during which CenturyLink and its industry underwent "massive" changes, as well as the alleged changing nature of "revenue impact" of alleged cramming behavior, I have not "offered a damages model capable of identifying the price impact, if any, of the various types and degrees of allegedly inflationary misconduct and [have] not proposed how to separate price impacts attributable to other non-fraud factors in this dynamic economic context."<sup>127</sup>

100. Just like his purported analysis of the Back-End corrective disclosures, Mr. Deal's examination of the Front-End disclosures is flawed. It certainly does not constitute reliable economic evidence that the misstatements lacked price impact.

***1. The Conceptual Framework Behind Mr. Deal's Front-End Analysis is Flawed***

101. The keystone of Mr. Deal's analysis is an examination of price movements on 52 alleged Front-End misstatement dates. Mr. Deal's approach is to determine how many of those 52 dates evinced statistically significant positive stock price movements. He found that four dates and appears to conclude, on that basis that there was a lack of

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<sup>126</sup> Deal Report, ¶36.

<sup>127</sup> Deal Report, ¶35 (emphasis added).

evidence that the misstatements in the Complaint impacted CenturyLink's stock price.<sup>128</sup> Setting aside that an absence of evidence is not an evidence of absence—*i.e.*, Mr. Deal's analysis, even if were coherent, would not disprove price impact—there are major conceptual problems with the approach he employs.

102. Implicit in Mr. Deal's analysis is an assumption that an actionable misstatement should be associated with a stock price movement that is statistically significant and positive. As a matter of economics, however, there is simply no such necessary relationship. While a misstatement that introduces or maintains inflation could be associated with a statistically significant stock price increase, there are perfectly logical reasons supported by the fundamental principles of finance why it might be associated with no significant price change at all, or even with a stock price decrease. For example, a misstatement that causes a company to appear to meet market expectations or a failure to disclose a negative fact might introduce inflation into a stock by preventing its price from decreasing – even though it would not be expected to cause a price increase. Similarly, a misrepresentation that repeats a prior misrepresentation might maintain an already inflated stock price without causing the price to increase significantly. And even a false statement that, in a vacuum, would be expected to increase a company's stock price might not have such an effect if it coincides with negative news from the company – and indeed, the stock price might even decline (as it might also with price maintaining statements and omissions).

103. In short, understanding the context of the allegations matters. As is further explained below, I conclude, based on my analysis of the Complaint, that, of the 52 dates on which Mr. Deal expects stock price increases, more than 50% contain disclosures that, based on their nature or context, would not be expected to be associated with stock price increases. These include statements that repeat previous misstatements, statements that simply confirm anticipated results, and statements that omit material information. A trained financial economist should know in advance to expect that these dates would not

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<sup>128</sup> Deal Report, ¶¶10, 140.

necessarily be expected to “have impacted CenturyLink’s securities prices.” Indeed, the Complaint and the Court’s motion to dismiss order included numerous discussions that certain misrepresentations were repetitive, were actionable omissions, or would have expected to maintain (but not necessarily further augment) inflation, such that no positive stock price movement should have been expected.<sup>129</sup> Mr. Deal’s failure to account for such factors in his analysis of the purported lack of Front-End price impact makes his analysis entirely unreliable.

104. Second, like his analysis of the alleged Back-End corrective disclosures, Mr. Deal admits his analysis is “preliminary,” “illustrative” and based on limited information and knowledge, as well as devoid of reference to or reliance upon even a single CenturyLink internal or non-public document.<sup>130</sup> After observing dates with statistically significant positive abnormal returns, Mr. Deal simply recites limited financial information that was disclosed that day, concluding from his cursory evaluation that price impact has not been shown. Because his statistical tests are not meaningful, and he does not consider additional evidence, his opinion cannot establish a lack of price impact.

**2. *Why Mr. Deal’s Inclusion of 52 Dates Is Flawed and Potentially Misleading***

105. Mr. Deal claims:

Plaintiffs identify allegedly inflationary disclosures on 55 different calendar days, which could potentially have impacted CenturyLink’s securities prices on **52 different market days**, spread across each quarter over a 4+ year Class Period.<sup>131</sup>

106. As discussed above, Mr. Deal’s inclusion of all 55 calendar dates with alleged misstatements as being expected to have “allegedly inflationary disclosures” misreads the

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<sup>129</sup> For example, Section V.A.

<sup>130</sup> Deal Tr. 116:13-117:1 (“Q I want to clarify it because I think it’s important. Have you looked at any internal CenturyLink documents dated during the class period? THE WITNESS: Just give me a moment here....The answer is no.”).

<sup>131</sup> Deal Report, ¶9 (footnote omitted).

Complaint.<sup>132</sup> For example, the Complaint explicitly states that numerous dates are associated with disclosures that were likely repetitive. For example,

**CenturyLink repeated these statements** throughout the Class Period, including in its annual reports filed on Form 10-K for fiscal year 2013 (the “2013 Annual Report”), filed on February 27, 2014; fiscal year 2014 (the “2014 Annual Report”), filed on February 24, 2015; fiscal year 2015 (the “2015 Annual Report”), filed on February 25, 2016; and fiscal year 2016 (the “2016 Annual Report”), filed on February 23, 2017.”<sup>133</sup>

107. Similarly:

**The Company repeated this same statement** in its 2013, 2014, 2015, and 2016 Annual Reports. Similarly, during investor conference calls on March 9, 2015, June 4, 2015 and March 7, 2016, Defendant Ewing stated “[w]e’re committed to being the broadband leader in our markets, offering advanced broadband services that meet the needs of our customers.”<sup>134</sup>

108. In addition, the Complaint alleges misrepresentations that, by their nature, would not be expected to impact securities prices. For example, the Complaint alleges that the company made misrepresentations in its Code of Conduct, but in my experience, investors expect a company to adhere to its code of conduct – so while the statements assuring compliance were alleged to be false, they would nonetheless be in line with investor expectations and would not be expected to necessarily cause securities price

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<sup>132</sup> Mr. Deal appears to have read the Complaint and interpreted it differently than the clear language suggests. Deal Tr. 135:19-136:12 (“Q And you’re saying -- again, the premise of a lot of your opinion is that there’s a physical be it quantifying or measuring that mix of information. Is that a fair statement? A I certainly agree with that, that there’s a lot of information. You have alleged 55 days of inflation, 52 of which where they expected to move the stock price five categories and so forth. On each of -- those days have lots of other information out there, so, you know, a form of your hypothetical is to say do I observe, you know, the first day -- the first information going up, and then all the rest of them are simply repetitions of exactly the same information, so I wouldn’t expect it. I don’t think that’s how you pled your case, but conceptually that would be a form of it. But I’m just saying that we don’t observe those incremental inflation occurring from those other days.”).

<sup>133</sup> Complaint, ¶195 (emphasis added).

<sup>134</sup> Complaint, ¶197 (emphasis added and removed).

increases. Nor would it necessarily be expected that positive price movements would be observed when CenturyLink's management denied violations of the Code of Conduct.

109. Similarly, the Complaint alleges numerous actionable omissions, including CenturyLink's failure to disclose material, negative facts in violation of Item 303.<sup>135</sup> It is hard to see why, from an economic standpoint, such omissions would necessarily be expected to be associated with a significant stock price increase; rather, a more natural interpretation is that the omissions prevented a stock price decrease (all else equal).

110. Below, I have identified more than 50% of the dates in Mr. Deal's analysis on which a trained financial economist would not necessarily expect to observe statistically significant returns. The largest category is associated with duplicate disclosures, which might have been material, but would not necessarily have been unanticipated, so would not have been expected to have impacted the price. The Complaint alleges that numerous false and misleading statements were repeated throughout the Class Period. In addition, CenturyLink, like most other publicly traded companies, issued earnings releases and held earnings conference calls *in advance* of their 10-K and 10-Q filings. So even though the dates CenturyLink filed its SEC Form 10-Ks and 10-Qs are dates with alleged misstatements (and are included in Mr. Deal's 52-day sample), it would not necessarily be expected that the information in those releases that had been previously announced in earnings releases and/or on conference calls would cause stock price increases. Similarly, in my experience as an academic, public company CEO and CFO, a public company's proxy statement (SEC Form 14DEFA) would not necessarily be expected to include unanticipated information, because proxy statements often repeat previously-disclosed information.

111. Likewise, as mentioned above, assurances by company management that they are adhering to publicly disclosed Codes of Conduct or other commonly observed business practices would not be expected to yield price increases. Similarly, a company's false denials that it was engaging in misconduct—*i.e.*, that it acted in accordance with

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<sup>135</sup> Complaint, ¶¶203, 221-24, 261-63.

widespread behavioral norms, such as when CenturyLink denied misconduct in connection with the Arizona A.G.’s consent order - would not be expected to cause price increases.<sup>136</sup> Third-party disclosures that might not be immediately widely disseminated would also not necessarily be expected to cause immediate price increases.

112. In the table below, I show that Mr. Deal included at least 27 dates, or 52% of his 52-date sample, on which a trained financial economist would not necessarily expect the information disclosed to “have impacted CenturyLink’s securities prices.”

	Dates	Cummulative Dates
Deal Figure 5 Purported Misrepresentation Dates	52	52
Duplicates -- 10-K and 10-Q following Earnings Announcements	15	37
Proxy Statements without Material Unanticipated Information	5	32
No Dissemination of Media Report to Business Press	5	27
Non-Public Document Filed by Company	2	25

113. Therefore, instead of the 52 dates Mr. Deal relies upon for his flawed Front-End analysis, there are only 25 dates that, based on a cursory review, *might* reasonably be expected to evince a positive price movement. This, of course, does not account for other factors I identified, such as contemporaneous disclosure of negative information, which could further reduce the number of days on which positive stock price movements could reasonably be expected.

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<sup>136</sup> See Complaint ¶247.

**3. Mr. Deal’s “Preliminary” Analysis<sup>137</sup> of the Price Movements on the Four Days with Statistically Significant Price Movements Is Unreliable and Potentially Misleading**

114. Mr. Deal appears to contend that having “only four” dates with “statistically significant positive abnormal returns”<sup>138</sup> is evidence of a lack of price impact. He also purports to analyze those days and show that the significant stock price might have been caused by other factors. Mr. Deal’s conclusions are unsupported.

115. As a preliminary matter, as set forth above, Mr. Deal’s test is wrong to consider 52 days as the number of days on which statistically significant stock price increases would be expected. Rather, there are only really 25 days, at most, where such increases **might** be expected, based on the allegations of the Complaint. According to generally-accepted principles of statistics, random chance would explain approximately one statistically significant stock price movement in 25 days, if statistical significance is determined at the 95% level.<sup>139</sup> Thus, the four days Mr. Deal identifies are approximately four times as many as would be expected by chance.

116. Mr. Deal’s subsequent analysis of the four days is also flawed. Mr. Deal purports to conduct a “preliminary” or “illustrative” examination, which is little more than a paragraph of recitation of events occurring on each of the four dates.<sup>140</sup> This cannot be

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<sup>137</sup> Deal Tr. 31:9-13 (“You’ll probably recall that I also did do at least a -- I would call it a preliminary analysis of the days and trying to map that at least, again, preliminarily and broadly to the allegations, the five categories of allegations.”); 32:15-19 (“Q And you mentioned that this was just a preliminary analysis; is that right? A Yeah. I would call it kind of illustrative. And my -- so it’s not intended to be the final.”); 74:1-10 (“Q As part of that, though, you haven’t developed your own model, again, proving the impossibility? A ... again, I haven’t been asked to take it all the way through to there, but I have gone down that path by doing all the analysis I’ve done,...”).

<sup>138</sup> Deal Report, ¶72 (italics in original) (“Among all 52 days on which the alleged misrepresentations potentially could have impacted CenturyLink’s stock price, *only four* have statistically significant positive abnormal returns.”).

<sup>139</sup> For a discussion of these issues see Hartzmark Report.

<sup>140</sup> Deal Report ¶¶73-76 or literally four paragraphs represent the sum total of Mr. Deal’s analysis of these four, what he views in Deal Report (¶72) as “days on which the alleged misrepresentations potentially could have impacted CenturyLink’s stock price.”



considered an in-depth and reliable economic examination of whether these dates evinced price impact from misstatements.<sup>141</sup>

117. Most critically, Mr. Deal does not even attempt to show that the price increases on the four dates were caused entirely by some factor other than the misstatements alleged in the Complaint. At most, he tries to show that CenturyLink's financial results could, in theory, explain some of the price increases. This analysis is flawed for at least two reasons.

118. First, the Complaint alleges that CenturyLink's financial results were generally inflated by sales misconduct, and Mr. Deal provides no affirmative evidence to show that the revenue results and financial performance he posits as an alternative explanation were not, in fact, driven in material part by CenturyLink's sales practices. Indeed, Mr. Deal does not investigate the alleged misstatements to determine whether it is reasonable to infer that they might or might not have caused price increases. Moreover, a cursory examination of the Complaint's allegations suggests that these dates generally coincided with positive revenue news that the Complaint alleges was driven, at least in part, by the Company's alleged sales misconduct.<sup>142</sup>

119. Second, Mr. Deal fails to acknowledge that the latter three dates, including *November 5, 2015* (CenturyLink's Q3 results), *February 11, 2016* (CenturyLink's 4Q 2015 results), and *December 7, 2015* (UBS Research Communications Conference disclosures)

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<sup>141</sup> All Mr. Deal's preliminary analysis demonstrates is that there are the common complexities in most earnings announcements. Deal Tr. 72:10-20 ("...I dig deep into those four days where I see positive abnormal returns and I see there's lots of things being disclosed and discussed on those days. So my conclusion is on those that not only is it complex, I agree with that, and one needs to propose a model that could deal with that complexity, which in my view is that has not been proposed, but also that it's going to be very, very hard, if not impossible, to actually show that; to show that there's any price impact...").

<sup>142</sup> See, e.g., Complaint ¶¶117 (pleading that November 2015 disclosures touting consumer segment revenue growth failed to "disclose the true driver of this sales growth," which was misconduct); ¶¶210-11 (discussing November 2015 disclosures and also Ewing's December 7, 2015 statement, which were alleged to falsely attribute revenue gains to legitimate causes instead of sales misconduct); ¶¶221 (alleging that explanations of revenue growth given in February 2016 were false and misleading because they were actually due, at least in part, to the Company's return to misconduct).

coincide with the disclosures of financial information associated with the period wherein the Plaintiffs have alleged that cramming activity accelerated. The Complaint alleges:

Just a month later, on June 2, 2015, and just three months after the Company announced that Defendant Puckett had been promoted to the head of global sales, CenturyLink announced that Defendant Puckett was leaving the Company. No explanation was given for her departure. A press release announcing the move quoted Puckett as saying that she was “looking forward to spending more time with my family and considering other leadership opportunities that allow me to continue to have a significant impact.”

Shortly thereafter, CenturyLink’s return to the metrics-based system and strict enforcement of sales quotas began to take hold.<sup>143</sup>

120. The impact of this activity would have been incorporated into CenturyLink’s Q3 financial results reported on November 5, 2015, CenturyLink’s 4Q 2015 earnings release issued on February 11, 2016, and in the disclosures made at the UBS Research Communications Conference held on December 7, 2015. Therefore, it is at minimum consistent with the allegations in the Complaint that artificial inflation could have been introduced into the CenturyLink Securities’ prices on those dates.<sup>144</sup>

#### ***4. Summary of Mr. Deal’s Flawed, Unreliable and Potentially Misleading “Preliminary” Analysis of Front-End Price Movements***

121. Mr. Deal’s “preliminary” and “illustrative” analysis of the alleged misstatement dates is unreliable for several reasons. First, it is based on a flawed sample that overstates the number of dates where it would be expected that there would be inflation introduced into the market price. Second, it is based on a simple recitation of certain aspects of information disclosed at the same time as each of four alleged Front-End

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<sup>143</sup> Complaint. ¶¶116-117.

<sup>144</sup> As discussed below, this does not mean that inflation was not introduced earlier or on different dates, as even the courts have agreed that “a public, material misrepresentation might not affect a stock’s price even in a generally efficient market.” See *Halliburton II* at 2414.

misstatements when there were positive statistically significant returns, as opposed to an in-depth price impact or loss causation analysis. Third, it is improperly premised on requiring there to be a positive statistically significant price movement for inflation to have been introduced into the market price.

122. Critically, these key conceptual flaws mean that Mr. Deal's Front-End analysis does not show that there was an absence of price impact from the alleged misrepresentations in the Complaint.

## **VI. MR. DEAL'S CRITICISMS OF THE PROPOSED DAMAGES METHODOLOGY ARE SIMPLY CLASS-WIDE COMMON ISSUES RELATED TO LOSS CAUSATION AND THE CONSTRUCTION OF AN ACTUAL INFLATION RIBBON**

123. In my Opening Report, I explained that Damages would be calculated using the OOP method, which is virtually the universal standard in securities class actions arising under Section 10(b), and which is tied to the theory of liability in Section 10(b) cases.<sup>145</sup> I also explained that the major input into the OOP method is the inflation ribbon, which measures the level of artificial inflation in the stock price each day, and which is common to the class.<sup>146</sup> Mr. Deal does not dispute that the OOP method is the appropriate method for calculating damages in this case, that its major input is the inflation ribbon, or that the inflation ribbon is common to the class.<sup>147</sup>

124. Mr. Deal's criticism of my proposed damages methodology focuses on what he asserts is my failure, in my Opening Report, to construct an inflation ribbon at the class certification stage, or to describe precisely how I would construct an inflation ribbon in this case. As he states:

[Dr. Hartzmark] has neither done, nor described, any method to measure, parse, or scale inflation around the alleged corrective disclosures [as well as] parse and scale the inflation ribbons to

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<sup>145</sup> Hartzmark Report, ¶¶184-92.

<sup>146</sup> Hartzmark Report, ¶¶186-91.

<sup>147</sup> Deal Tr., at 212:21 – 213:11, 215:20 – 217:13.

account for the combinations of the five categories of alleged misrepresentations, the 52 alleged inflationary dates, the nearly year-long alleged “low cramming” period in the middle of the Class Period, and the three alleged corrective disclosure dates.<sup>148</sup>

125. In addition, Mr. Deal has opined that constructing an inflation ribbon will be difficult, if not impossible, in this case, due to what he claims are extraordinary complexities present here.<sup>149</sup>

126. As I explain in more detail below, having reviewed Mr. Deal’s Report and deposition testimony, my opinion is that the issues Mr. Deal raises are irrelevant and premature. Mr. Deal’s concerns are irrelevant because every issue he raises is common to the class, and therefore, as I understand from Plaintiffs’ Counsel, fails to bear on the question of whether or not the class should be certified in this case. The issues he raises are also premature, because as I understand based on my experience and from Plaintiffs’ Counsel, they are addressed at later stages of litigation, typically following completion of discovery, further expert work, and determinations of liability.

127. In addition, based on my extensive experience as an expert in securities class action cases, my opinion is that Mr. Deal’s contentions about the difficulty or impossibility of calculating damages here are incorrect because commonly-used economic techniques exist that can address the issues he identifies and, in any event, to the extent the supposed complexities he cites materialize at all, will likely be simplified through further factual and expert discovery and adequately dealt with by the time any damages analysis is conducted. For these reasons, I continue to hold the opinion that, as in virtually every Section 10(b) securities class action, damages here can be calculated on a class-wide basis using the OOP method described in my Opening Report.

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<sup>148</sup> Deal Report, ¶12 (emphasis added). Parsing is also mentioned in multiple other paragraphs, including ¶¶10, 14, 16, 24, 68.

<sup>149</sup> See, e.g., Deal Report, ¶¶10, 72, 77, 186; Deal Tr., at 34:16 – 35:14, 37:7 – 13, 74:9 – 14, 217:16 – 218:21.

A. Mr. Deal's Reliance on Purported "Complexity" Is a Red Herring

128. Mr. Deal's primary opinion can be summarized as follows: *because of certain purported "complexities" specific to this CenturyLink matter, it will be challenging, if not impossible, to construct the actual inflation ribbon*. Specifically, according to Mr. Deal, "the ribbon would need to incorporate the complexity of the allegations in this Action:"

- It would need to be scaled to vary over time ...;
- It would need to be further scaled to account for the alleged "low cramming" period in the middle of Class Period;
- It would need to be parsed to account for the five different categories of alleged misrepresentations...;
- It would need to be scaled to vary across the ... alleged corrective disclosure dates;
- It would need to account for the FUD affecting stock and bond prices vs. any truth to the allegations in the lawsuits and investigations, including any material resolution, findings, or expected material impact on future cash flows.<sup>150</sup>

129. As an initial matter, these purported "complexities" are irrelevant to the question of whether a common damages methodology exists because each of these issues is common to the class. Mr. Deal admitted as much during his deposition, when he testified that issues concerning the construction of the inflation ribbon are common issues that raise no predominance questions.<sup>151</sup> As I explained in my Opening Report, the OOP method is flexible, and can accommodate variations in its inflation ribbon input while mechanically determining damages.

130. Relatedly, these issues are plainly premature, given their dependence on contested liability questions that will be determined in this litigation at a later date, following the conclusion of discovery and (likely) additional expert work. For example, unless specific categories of alleged misstatements are eliminated from the case, it is likely

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<sup>150</sup> Deal Report, ¶186 (emphasis omitted).

<sup>151</sup> Deal Tr. 216:22-217:13.

there will be no need to parse their effects as measured by the corrective disclosures when constructing the inflation ribbon. Likewise, unless FUD is found to be a separate, nonfraudulent cause of the securities price declines on corrective disclosure days, there will be no need to “account” for it in the inflation ribbon. Given that cases typically evolve over the course of discovery, summary judgment, and trial, and the inflation ribbon will necessarily need to accommodate any relevant developments, actually constructing it at the class certification stage – which Mr. Deal complains I have not done<sup>152</sup> – would be an illogical exercise.<sup>153</sup>

131. Moreover, as a general matter, given my experience as the consulting and testifying expert in dozens of class action securities matters with claims under Section 10(b), it is my opinion that the purported “complexities” Mr. Deal cites are hardly unique to this CenturyLink matter. Some combination of parsing, scaling, multiple allegations, and different categories of misrepresentations needs to be accounted for in virtually every securities matter, whether it involves a class action or an individual lawsuit.<sup>154</sup> Assuming

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<sup>152</sup> Deal Report, ¶12. Indeed, Mr. Deal’s arguments could be read to suggest that it is necessary, at class certification, for plaintiffs to put forth **multiple potential** inflation ribbons, to account for the various permutations of factual and legal developments that **could** occur. Clearly, that is not required, because whatever those inflation ribbons turn out to be, they would be applied on a common basis to all class members.

<sup>153</sup> As discussed above, Mr. Deal critiques my Opening Report for assuming that the allegations in the Complaint will be proven at trial. It is my understanding from counsel that such an assumption is not only appropriate at this stage, but even at the damages stage. *See Sancom, Inc. v. Qwest Communications Corp.*, 683 F.Supp. 2d 1043, 1068 (D. S. D. 2010) (“And, it is well-settled that a damages expert like Canfield can testify as to damages while assuming the underlying liability.”). In any event, as set forth in more detail below, the OOP methodology is flexible, and can account for changes in the inflation ribbon due to liability determinations made in the case.

<sup>154</sup> Mr. Deal contrasts the purported complexity in this matter to what he considers to be an (unrealistic) “classic” case in ¶¶4-5, 8, and 106-107. Mr. Deal uses the term “complex” “complexities,” “complexity” seventeen times in his report to make the irrelevant point that in his view this case is more complex than what he refers to as the unrealistic simplistic “classic” securities matter.

I note, that although Mr. Deal claims this is a very complex matter, when it comes to the nature of the misstatements and alleged corrective disclosures and the speed of response he asserts the opposite, stating that corrective disclosures revealed “relatively straightforward information.” Deal tr. 176:17-22.

parsing and scaling were appropriate at a later stage of this case, there are many techniques that are routinely used to reliably and reasonably estimate the portion of the price reaction caused by misrepresentations and alleged corrective disclosures.

132. For parsing and scaling, these often include utilizing, among other inputs: intraday pricing analysis (if disclosures are made at different times); analysis of market and media commentary; examination of the elements that cause changes in actual or estimated earnings-per share or EBITDA (by individual analysts, the company or a consensus of analysts) over time; analysis of detailed accounting and company information, such as a breakdown of revenues and earnings for different divisions, businesses, types of customers, facilities, geographic locations, products, etc.; analysis of quantifiably industry trends and other data; and other methods. In addition, material produced in discovery could shed light on issues such as the scale and scope of misconduct and the underlying reasons for the disclosures (if such reasons were misstated or omitted), and other expert testimony related to liability issues could also provide a basis or relevant inputs for parsing and scaling.

133. That these concerns are not unusual or specific to this matter is evinced by that fact that Mr. Deal's complexity arguments and criticisms of my common damages methodology closely mimic challenges to a common damages methodology that have been made in numerous other securities class actions.

134. Indeed, Mr. Deal testified that in one of his consulting engagements, *City of Pontiac v. Dell*, he led an Analysis Group team that was "exactly addressing class certification issues, very similar, actually, to the report that I've offered in terms of the basic framing and issues."<sup>155</sup> In that case, in its class certification opinion, the Court stated:

Although the corrective nature of a disclosure and the prior disclosure of the substance of the alleged misrepresentation

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<sup>155</sup> Deal Tr. 60:19-61:1. Mr. Deal raised the *Dell* matter in explaining that he had never offered an opinion at the class certification stage in a Section 10(b) securities class action but had supported other experts in similar matters. Deal Tr. 50:2-51:7. While the *Dell* case was the one such consulting matter he was able to identify by name in the past six years—*i.e.*, since *Halliburton II* was decided—it is my understanding from Counsel that the expert he supported, Prof. Hubbard, submitted a report *after* the class certification stage, and did not offer an opinion at class certification. Deal Tr. 58:3-17, 60:9-61:6.



both bear on the issue of price impact, they do not affect the question of predominance at the class-certification stage. *See Halliburton II*, 134 S. Ct. at 2416. That is because both issues will apply to all plaintiffs' claims on the merits. "The class is entirely cohesive: It will prevail or fail in unison. In no event will the individual circumstances of particular class members bear on the inquiry." *Amgen Inc. v. Connecticut Retirement Plans and Trust Funds*, 568 U.S. 455, 460, 133 S. Ct. 1184, 185 L. Ed. 2d 308 (2013). Finally, the court finds that Defendants' contention that other factors unrelated to the alleged misrepresentations contributed to the price decline at the end of the Class Period relates to the issue of loss causation and therefore cannot serve to rebut the *Basic* presumption of reliance at class certification. *See Erica P. John Fund, Inc. v. Halliburton Co.*, 563 U.S. 804, 813, 131 S. Ct. 2179, 180 L. Ed. 2d 24 (2011) ("*Halliburton I*"). Consequently, the court finds that the Retirement System has satisfied the requirements of Rule 23(b)(3). Therefore, the court concludes that class certification is appropriate.<sup>156</sup>

135. Most of the matters I opine on have, like this matter, "complexities" such as multiple alleged misrepresentations and multiple corrective disclosures – and, unlike this matter, frequently exhibit the **added** complication that some alleged misrepresentations or corrective disclosures were dismissed prior to the filing of a motion for class certification. For example, this was the case in my recent expert engagement in *Signet*,<sup>157</sup> where the Defendants' expert critiqued my proposed common damages methodology stating:

Dr. Hartzmark's proposed analysis is not a reliable methodology for measuring alleged artificial inflation throughout the Class Period consistent with Plaintiff's Claims in this matter. Nor am I aware of a method that could reliably be applied to the multifaceted and numerous purported corrective disclosures to estimate inflation over the four-and-a-half-year purported Class Period. The confounding (i.e., nonfraud) information disclosed in the numerous purported corrective disclosures, many of which are disappointing

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<sup>156</sup> *City of Pontiac Genl. Emps. Retirement Syst. v. Dell Inc.*, 2018 WL 1558571, at \*6 (W.D. Tex. Mar. 29, 2018).

<sup>157</sup> *In re Signet Jewelers Limited Sec. Litig.*, 2019 WL 3001084 (S.D.N.Y. 2019).



earnings announcements, cannot be controlled for in an event study such as the one Dr. Hartzmark employs.

Industry developments such as declining mall traffic had a disproportionate negative effect on Signet's business model that help account for disappointing earnings announcements, a fact that would not be captured in the event study results. Moreover, there is no reliable basis to calculate inflation over the four-and-a-half year purported class period based on the price reactions to the alleged corrective disclosures even assuming away the issue of confounding information.<sup>158</sup>

The fundamental reason Dr. Hartzmark has failed to provide a reliable method to calculate class-wide damages is the inability to control for confounding (i.e. nonfraud) information.<sup>159</sup>

In total, there are nine corrective disclosures ... [and a]ll these disclosures suffer from the general problem of nonfraud factors documented above.<sup>160</sup>

Furthermore, Dr. Hartzmark has failed to provide a reliable method to "adjust" for inflation for each day of the Class Period using the corrective disclosure price reactions. The Class Period spans a period of four and half years, involving dozens of alleged misrepresentations - many on earnings announcements, and nine alleged corrective disclosures over a period of almost two and half years that allegedly revealed the "truth."<sup>161</sup>

For all the reasons discussed above, Dr. Hartzmark has not provided a reliable method to calculate damages in this matter and, based on the challenges in this case, I am not aware of a common methodology to do so.<sup>162</sup>

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<sup>158</sup> Expert Report of Allen Ferrell Ph.D., *In Re Signet Jewelers Limited Securities Litigation*, April 26, 2019, S.D.N.Y Case No. 1:16-cv-06725-CM, Dkt. 148-1 ("Ferrell Signet Report"), ¶50 (emphasis added).

<sup>159</sup> Ferrell Signet Report, ¶52 (emphasis added).

<sup>160</sup> Ferrell Signet Report, ¶58 (emphasis added).

<sup>161</sup> Ferrell Signet Report, ¶62 (emphasis added, footnote omitted).

<sup>162</sup> Ferrell Signet Report, ¶63 (emphasis added).

136. The *Signet* matter was as or more complicated than this case: it concerned allegations of misleading accounting, other false and misleading statements concerning the company's credit portfolio and also claims related to claims of sexual harassment in a single class action litigation.<sup>163</sup> At the class certification stage, the *Signet* court found:

Plaintiffs burden at this stage is simply to propose a methodology for calculating damages that corresponds to its theory of liability. It has done so here. Dr. Hartzmark's purports to "us[e] the results of an event study along with the disclosures of firm-specific information" to measure "the level of artificial inflation in the prices of the Signet common stock" based upon "price reactions to disclosures revealing [Defendants'] alleged misstatements and omissions." (Hartzmark Rept. ,r 94.) "From this, daily levels of inflation can be calculated by adjusting the inflation measure for each day throughout the Class Period." (Id.) **This methodology, which applies on a class-wide basis, is capable of measuring the out-of-pocket losses suffered by the Class members.**<sup>164</sup>

137. Moreover, unlike Mr. Deal, who I understand has never offered sworn testimony opining on the appropriate damages methodology at the class certification stage,<sup>165</sup> I have opined on the common damages methodology in over 20 matters, and in each one where the respective court has ruled on class certification prior to the case settling, the court credited my opinion on the existence of a common damages methodology.<sup>166</sup>

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<sup>163</sup> *In re Signet Jewelers Limited Sec. Litig.*, 2019 WL 3001084 (S.D.N.Y. 2019) at \*6.

<sup>164</sup> *In re Signet Jewelers Limited Sec. Litig.*, 2019 WL 3001084 (S.D.N.Y. 2019) at \*20 (emphasis added).

<sup>165</sup> Deal Tr. 50:2-50:7.

<sup>166</sup> *Laurence Rougier, et al. v. Applied Optoelectronics, Inc., et al.*, Memorandum and Recommendation, (S.D. Tx. Nov. 13, 2019), Dkt. 125 (which was adopted by the Court in Order Adopting Magistrate Judge's Memorandum and Recommendation entered December 20, 2019, Dkt. 131), p. 30 (finding that "Plaintiffs' proposed damages model comports with the requirements of Rule 23(b)(3) as set forth in *Comcast Corp. v. Behrend*, 569 U.S. 27 (2013)."). *Id.* at 31 (finding that "Furthermore, courts recognize event studies, like the one used by Dr. Hartzmark, as an accepted method for determining artificial inflation and out-of-pocket damages in suits involving fraud on the market liability."). *Id.* at 34-35 (finding that "Dr. Hartzmark's report and supplemental report describe at length his method for calculating the

138. Finally, the few Section 10(b) cases that have gone to trial illustrate that the issues Mr. Deal has raised concerning the inflation ribbon are premature and mistaken. In *Household* and *Vivendi*—two matters where there were jury verdicts—the courts accepted the very OOP damages methodology described in my Opening Report.<sup>167</sup>

139. Moreover, these cases faced similar or greater complexities than this case does. For example, *Household* involved approximately 40 misrepresentations over a roughly 3.5 year period, while *Vivendi* involved 57 misrepresentations over a nearly-two-year period.<sup>168</sup> Yet in both of these cases, the trier of fact was able to construct actual

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“but for” value of the stock, for disaggregating inflation or price fluctuations not related to the misrepresentations found by a jury, and how he would use the inflation ribbon to methodically calculate damages for each Class Member. Thus, unlike the plaintiffs in *BP I*, the Plaintiffs here have satisfied their burden to demonstrate a damages model that calculates artificial inflation, the but for price, and will disaggregate inflation unrelated to fraud. Also, as was the case for the post-explosion subclass the district court certified in *BP II*, there is no disconnect between Plaintiffs’ theory of liability and damages model in violation of *Comcast*.”) (citations omitted). *Id.* at 36 (“As detailed above, Plaintiffs’ method for demonstrating class-wide damages is consistent with its fraud on the market theory of liability, Dr. Hartzmark proposes a damage methodology that will disaggregate losses not attributable to fraud found by the jury, and class certification under Rule 23(b)(3) will not violate *Comcast*.”). *Id.* at 38 (finding that “Plaintiffs have also proposed a damages methodology that is common to the class and is properly tethered to their corrective disclosure theory of liability.”).

*Christakis Vrakas, et al. v. U.S. Steel Corp., et al.*, Memorandum Order (W.D. Pa., December 31, 2019), 2019 U.S. Dist LEXIS 222783, at \*20 (finding that “Plaintiffs cite several cases in this Circuit and elsewhere that affirm the appropriateness of the out-of-pocket methodology that Dr. Hartzmark proposes as a sufficient damages model for class certification purposes.” (footnote omitted)).

*W. Palm Beach Police Pension Fund, et al. v. DFC Global Corp., et al.*, 2016 WL 4138613, at \*13 (E.D. Pa. Aug. 4, 2016) (finding that “Dr. Hartzmark has data underlying his conclusions and [the defendants’ expert] just has noise”).

*William D. Wallace, et al. v. IntraLinks et al.*, Opinion (S.D.N.Y., September 30, 2014), Dkt. 99, p. 19 (finding that “While calculating the proper damages based on the date of purchase and sale may be complicated, it does not demand excessive individual inquiry. Plaintiff’s proposed determination of damages by event study appears to be a workable methodology of determining damages on a class-wide basis that conforms to its theory of liability, thus meeting the requirements of *Comcast Corp. v. Behrand*, 133 S.Ct. 1426 (2013).”

<sup>167</sup> *Household* Verdict Form filed May 7, 2009 02 CV 5893; *In Re Vivendi Universal, S.A., Secs. Litig.*, Verdict Form filed February 2, 2010 02 Civ. 5571(RJH)(HBP)..

<sup>168</sup> *Id.*

inflation ribbons.<sup>169</sup> Review of these inflation ribbons further confirms that the issues Mr. Deal complains about are of no moment. For example, in each case, inflation varied significantly over time, and, in the case of *Vivendi*, even reached zero at one point during the class period – one of the issues Mr. Deal repeatedly suggests renders creation of an inflation ribbon impossible here.<sup>170</sup> Moreover, the verdict forms in *Household* and *Vivendi* underscore that determining the inflation ribbon is ultimately a factual question that plainly is premature at this stage.

140. Here, the common damages methodology I propose is flexible and will account for the “complexities” and whatever else the trier of fact determines to be the appropriate misstatements and corrective disclosures, as well as which claims they apply to and when the misstatements commenced. Thus, to the extent the trier of fact determines at a later stage that all or a portion of the information allegedly revealed on a date that introduced or removed artificial inflation is different than what I develop based on my analysis and assumptions as to liability, I would adjust my inflation ribbon accordingly. Once I adjust the inflation ribbon based on the findings of the Court or trier of fact, I then will use this as an input to my formula and applying it class-wide using my common damages methodology to calculate individual investor harm.

## VII. CONCLUSION

### 1. *Issues Mr. Deal Does Not Dispute*

- Mr. Deal does not dispute that CenturyLink common stock and the 7.6% Note traded in efficient markets.
- Mr. Deal does not dispute that the out-of-pocket (“OOP”) damages methodology that I describe in my Opening Report is virtually universal standard, “typically used” and the appropriate methodology for calculating class-wide damages for claims under Section 10(b) of the Exchange Act or that it applies in this case.

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<sup>169</sup> *Id.*

<sup>170</sup> *See, e.g.,* Deal Report, ¶¶12-13, 32, 39.

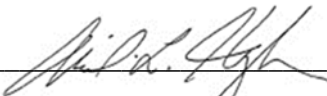
- Mr. Deal does not offer an explicit opinion, nor does he put forth evidence that there is an absence of price impact from either his examination of the alleged Front-End misstatements or the alleged Back-End corrective disclosures.

## ***2. Issues on Which Mr. Deal and I Differ***

- Mr. Deal's report and related analyses do not demonstrate an absence of price impact. As his report and deposition testimony make clear, Mr. Deal was not engaged, nor does he offer any opinion that there is a lack of price impact of CenturyLink Securities' prices from the misrepresentations and omissions alleged in the Complaint. The analyses Mr. Deal does provide are insufficient to show that Defendants' misstatements did not impact the price of CenturyLink securities. To the contrary, Mr. Deal's analyses support the opinion that there is no evidence of a lack of price impact.
- Mr. Deal's report and deposition testimony concerning my common damages methodology essentially amounts to an argument that it will be challenging to construct the inflation ribbon that will be applied class-wide to calculate individual investor OOP damages. This is incorrect; there are numerous economic and statistical tools that can be used to assist the trier of fact in determining how to construct the inflation ribbon. Based on my experience and my discussions with Plaintiffs' Counsel, my understanding is that it is irrelevant to class certification because issues concerning the construction of the inflation ribbon are issues that are common to the class.

I declare under penalty of perjury that the foregoing is true and correct.

***RESPECTFULLY SUBMITTED THIS 4<sup>th</sup> DAY OF MAY 2020***

  
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Michael L. Hartzmark, Ph.D.

# Exhibit 10

**UNITED STATES DISTRICT COURT  
DISTRICT OF MINNESOTA**

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**IN RE: CENTURYLINK SALES  
PRACTICES AND SECURITIES  
LITIGATION**

This Document Relates to:

Civil Action No. 18-296 (MJD/KMM)

**MDL No. 17-2795 (MJD/KMM)**

**DECLARATION OF RYAN M.  
BLAIR IN SUPPORT OF  
DEFENDANTS' MEMORANDUM  
OF LAW IN OPPOSITION TO  
PLAINTIFFS' MOTION FOR CLASS  
CERTIFICATION AND  
APPOINTMENT OF CLASS  
REPRESENTATIVES AND CLASS  
COUNSEL**

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I, Ryan M. Blair, hereby declare as follows:

1. My name is Ryan Blair and I am a Partner with the law firm of Cooley LLP. I am a member in good standing of the bar of California.
2. I serve as counsel to Defendants CenturyLink, Inc., Glen F. Post, III, R. Stewart Ewing, Jr., David D. Cole, Karen Puckett, Dean J. Douglas, and G. Clay Bailey in this matter.
3. I respectfully submit this declaration pursuant to 28 U.S.C. § 1746 in order to transmit to the Court certain documents referenced in Defendants' Memorandum of Law in Opposition to Plaintiffs' Motion for Class Certification and Appointment of Class Representatives and Class Counsel filed concurrently herewith.
4. I have personal knowledge of the facts set forth in this Declaration.
5. Attached as **Exhibit 1** is a true and correct copy of the Expert Report of Bruce Deal dated March 23, 2020.

6. Attached as **Exhibit 2** is a true and correct copy of excerpts of the transcript from the February 25, 2020 deposition of Michael L. Hartzmark.

7. Attached as **Exhibit 3** is a true and correct copy of Plaintiffs' Responses and Objections to Defendants' Second Set of Interrogatories dated March 4, 2020.

8. Attached as **Exhibit 4** is a true and correct copy of a press release issued by the State of Oregon Department of Justice dated December 31, 2019.

9. Attached as **Exhibit 5** is a true and correct copy of a document produced by Defendant CenturyLink, Inc. and bearing Bates number CTLMNSEC00500894. This document was designated "Highly Confidential – Attorneys' Eyes Only" under the October 19, 2019 Protective Order entered in this action and has been filed with the Court under seal.

10. Attached as **Exhibit 6** is a true and correct copy of excerpts of the transcript from the March 5, 2020 30(b)(6) deposition of the State of Oregon.

11. Attached as **Exhibit 7** is a true and correct copy of a spreadsheet produced by Plaintiffs in native format and bearing Bates number PL\_0005123. This document was designated "Confidential" under the October 19, 2019 Protective Order entered in this action and has been filed with the Court under seal.

12. Attached as **Exhibit 8** is a true and correct copy of excerpts of the transcript from the March 3, 2020 deposition of Named Plaintiff Fernando Alberto Vildosola.

13. Attached as **Exhibit 9** is a true and correct copy of a *Bloomberg* article dated June 16, 2017 produced by Plaintiffs and bearing Bates number PL\_0003503.



14. Attached as **Exhibit 10** is a true and correct copy of a *Bloomberg* article dated June 19, 2017 produced by Plaintiffs and bearing Bates number PL\_0003511.

15. Attached as **Exhibit 11** is a true and correct copy of a *Bloomberg* article dated July 12, 2017 produced by Plaintiffs and bearing Bates number PL\_0542835.

I hereby declare under the penalty of perjury that the foregoing is true and correct.

Executed this 23rd day of March, 2020, in San Diego, CA.

/s/ Ryan Blair

Ryan M. Blair

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# Exhibit 4



MENU

[DOJ Home \(https://www.doj.state.or.us/\)](https://www.doj.state.or.us/) / [AG Rosenblum Announces \\$4 Million Settlement with CenturyLink \(\(media\)\)](#)

## AG Rosenblum Announces \$4 Million Settlement with CenturyLink

December 31, 2019 • Posted in [Consumer Protection \(https://www.doj.state.or.us/media-home/news-media-releases/category/consumer-protection/\)](https://www.doj.state.or.us/media-home/news-media-releases/category/consumer-protection/), [Media Release \(https://www.doj.state.or.us/media-home/news-media-releases/category/media-releases/\)](https://www.doj.state.or.us/media-home/news-media-releases/category/media-releases/)

Oregon Attorney General Ellen Rosenblum today announced a \$4 million settlement ([https://www.doj.state.or.us/wp-content/uploads/2019/12/CenturyLink\\_-\\_AVC\\_19CV56401.pdf](https://www.doj.state.or.us/wp-content/uploads/2019/12/CenturyLink_-_AVC_19CV56401.pdf)) with the global telecommunications company CenturyLink for engaging in deceptive advertising by door-to-door salespeople, deceptive billing practices, undisclosed fees, and failing to apply promised discounts to customer accounts. Since 2014, Oregon DOJ has received more than 1,200 consumer complaints about CenturyLink.

As part of the settlement, CenturyLink also will refund \$672,000 to 8,212 Oregonians who were overcharged for their services, or did not receive the promised discount. The impacted Oregon consumers will be contracted by CenturyLink directly, but any consumers with questions can contact the Oregon Attorney General's Consumer hotline at 877-877-9392.

"Purchasing internet, phone service and cable is confusing enough without false promises, and confusing prices and fees. Today's settlement sends a clear message that hidden fees and other forms of unfair and deceptive business practices will not be tolerated in Oregon," said Attorney General Rosenblum.

Specifically, Oregon consumers complained that CenturyLink charged more than the promised price, or they received multiple bills each month for different amounts, were billed for services after they had cancelled the service, or were billed for modems before they were installed. Consumers also complained about the quality of service, Internet speed that was much slower than what was promised, or Internet service so slow that it was unusable.

Under the settlement, which was filed in Multnomah County Circuit Court, CenturyLink must:

- Stop charging new customers the "Internet Cost Recovery Fee", a fee that was not always previously disclosed to consumers until they received their first bill.
- Stop charging a "Broadband Cost Recovery Fee".
- Allow current customers to have an opportunity to transition to another plan without the fee.
- Clearly disclose all mandatory fees and charges in future advertisements.
- Stop charging cancellation and unreturned equipment fees if they are not disclosed at the time of sale.

In February 2014, Oregon DOJ opened an investigation of CenturyLink in response to over 1,000 consumer complaints, including complaints about the company misrepresenting the price of services, failing to inform consumers of terms and conditions that could affect the price, and billing consumers for services they never received. In 2018, complaints about telecommunication services topped Oregon DOJ's top 10 consumer complaints.

Oregon DOJ will continue to lead a separate securities class action lawsuit arising from the same conduct.

Attorney General Rosenblum asks any Oregonian who believe they have received bills that include undisclosed fees [to file a consumer complaint \(https://www.doj.state.or.us/consumer-protection/sales-scams-fraud/report-scams-fraud/\)](https://www.doj.state.or.us/consumer-protection/sales-scams-fraud/report-scams-fraud/), or contact the Attorney General Consumer Hotline.

*The Oregon Department of Justice (DOJ) is led by Attorney General Ellen Rosenblum, and serves as the state's law firm. The Oregon DOJ advocates for and protects all Oregonians, especially the most vulnerable, such as children and seniors.*